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Amy J. Martin
Amy J. Martin
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PATENT

#4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Mount et al.

Serial No.: 09/835,976

Group Art Unit: Not Assigned

Filed: April 16, 2001

Docket No.: 1242/26/2

Confirmation No.: Not Assigned

For: PURIFIED AND ISOLATED POTASSIUM-CHLORIDE COTRANSPORTER
NUCLEIC ACIDS AND POLYPEPTIDES AND THERAPEUTIC AND
SCREENING METHODS USING SAME

Commissioner for Patents
Washington, D. C. 20231
Attention: Official Draftsman

TRANSMITTAL OF FORMAL DRAWINGS

Dear Sir:

Please find enclosed a new set of formal drawings (42 sheets) for filing in the
above-identified U.S. Patent Application.

Respectfully submitted,

JENKINS & WILSON, P.A.

Date: August 17, 2001

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25297

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1242/26/2 AAT/ajm

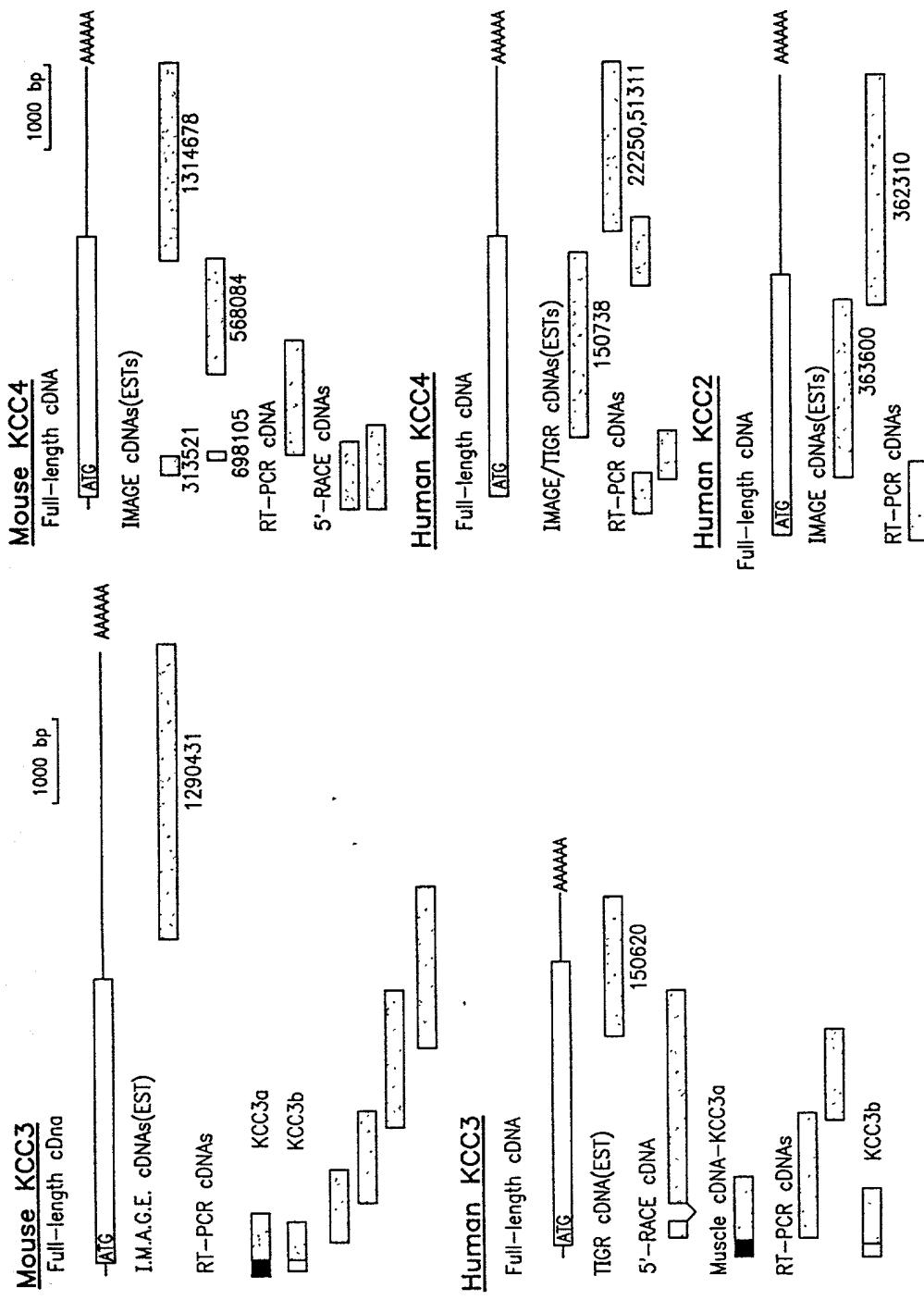


FIG. 1

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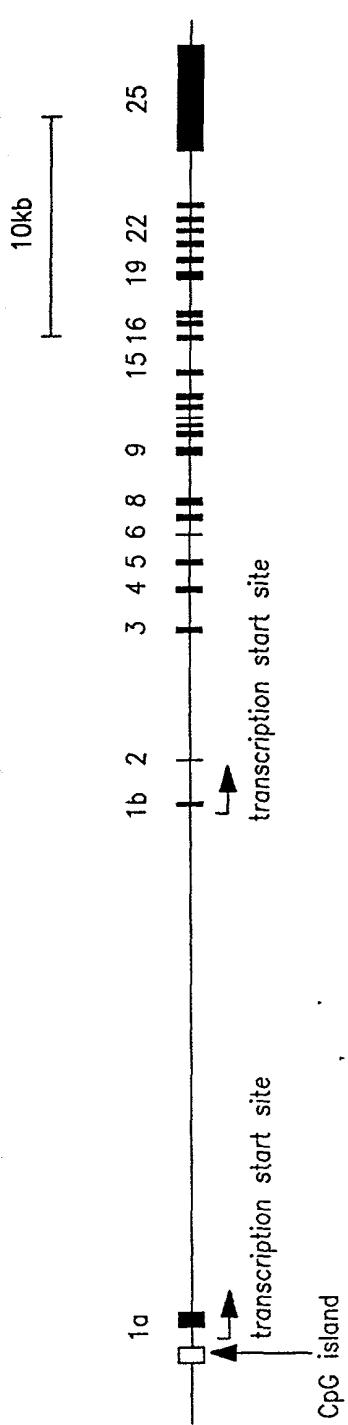


FIG. 2A

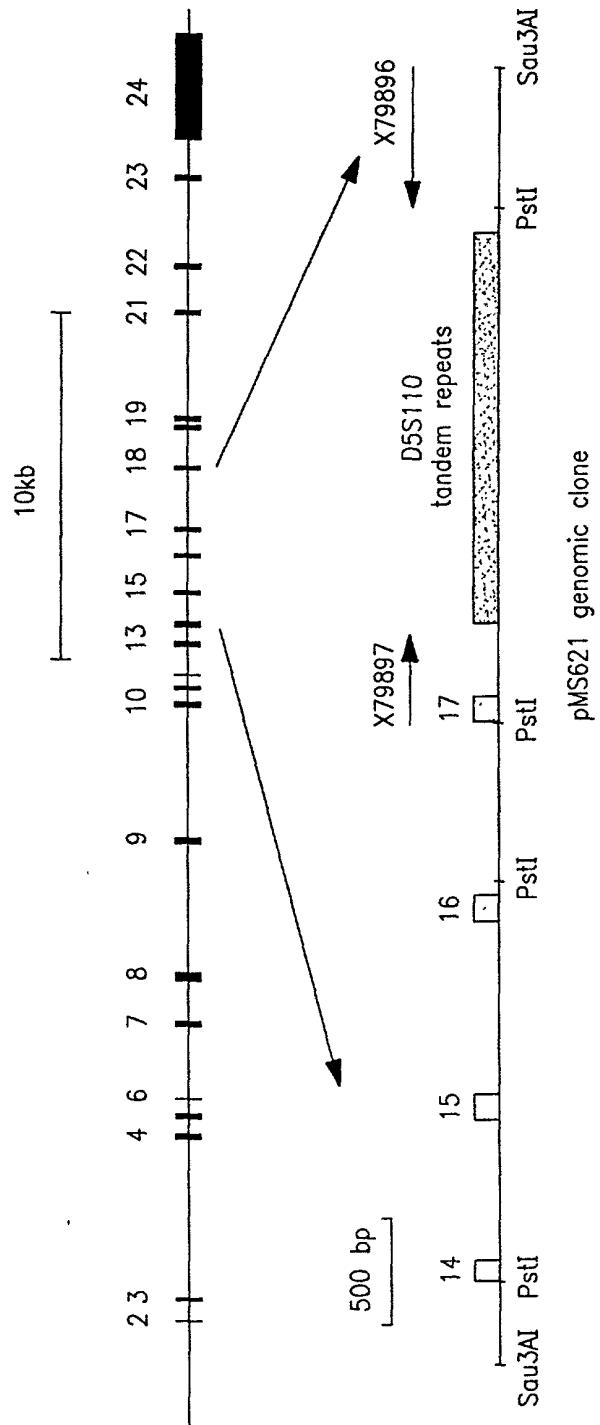


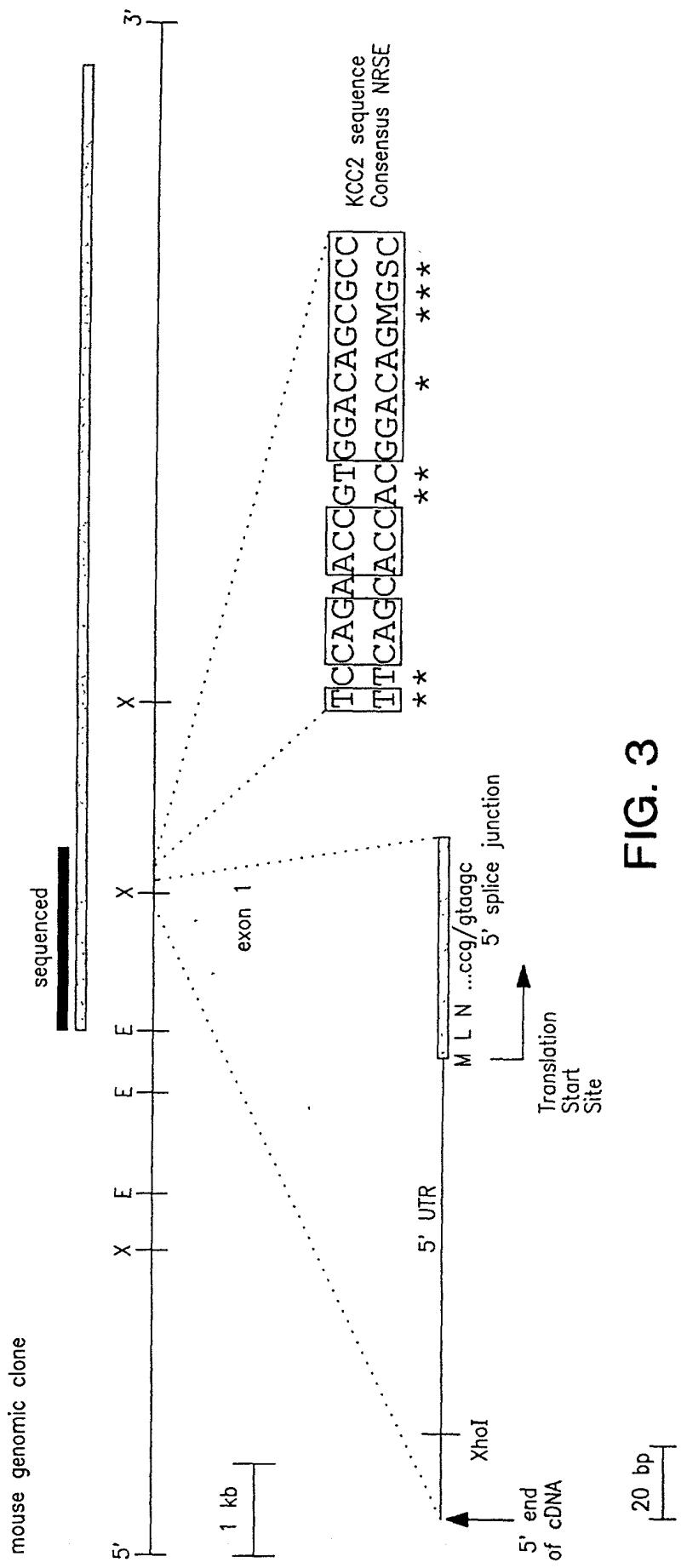
FIG. 2B

Title: Purified and Isolated Potassium-Chloride Octapeptides, Nicotinic Acids and Polypeptides and Therapeutic and Screening Methods Using Same

Applicant(s): Mount et al.

Serial No.: 09/835,976

COPY



3
FIG.

COPY

probe dilution 1:1 1:4 1:20 1:100
nuclear proteins - + - + - + - +

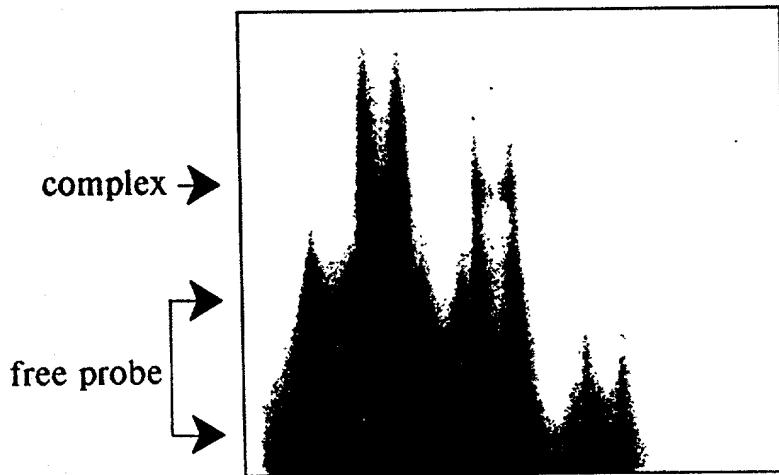


FIG. 4A

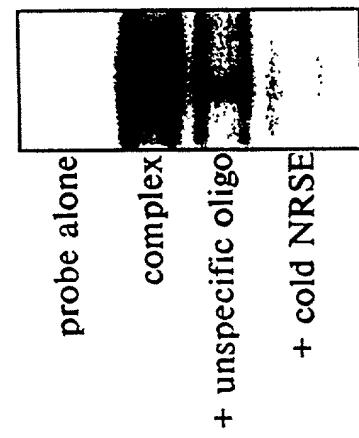


FIG. 4B

Title: Purified and Isolated Potassium-Chloride Cotransporter
Nucleic Acids and Polypeptides and Therapeutic and
Screening Methods Using Same
Applicant(s): Mount et al.
Serial No.: 09/835,976

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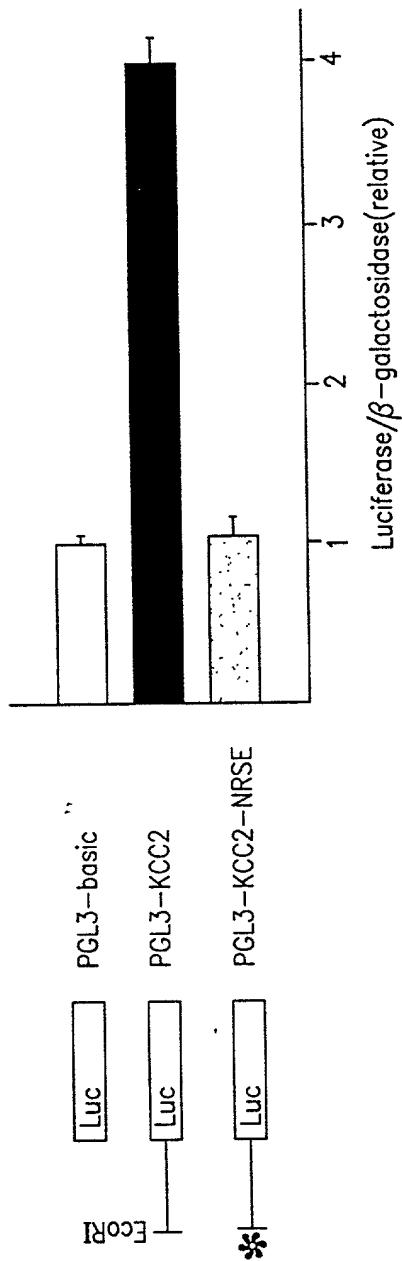


FIG. 5

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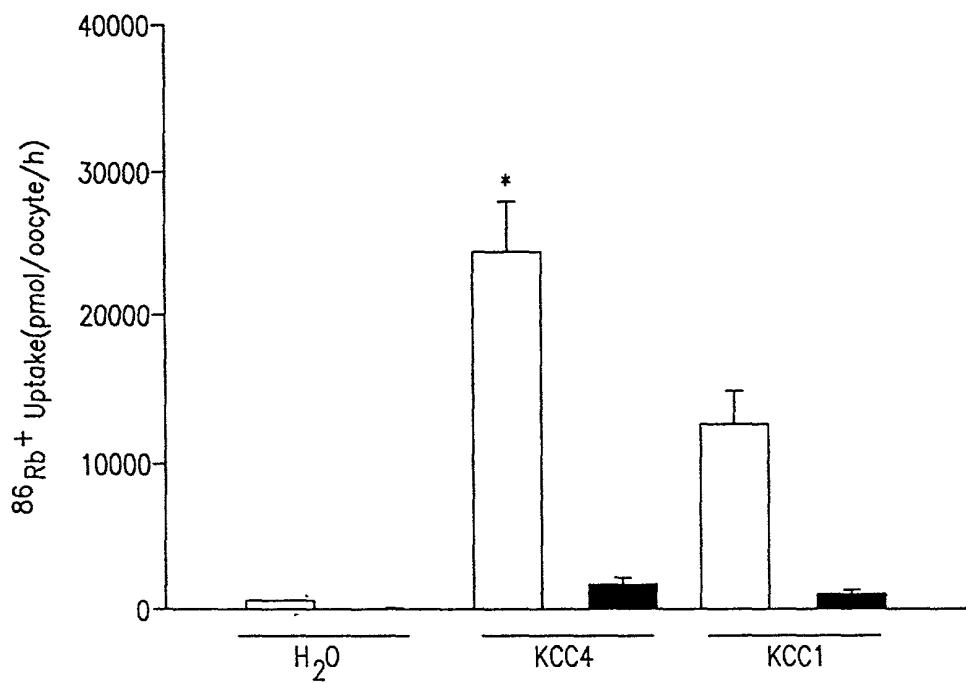


FIG. 6

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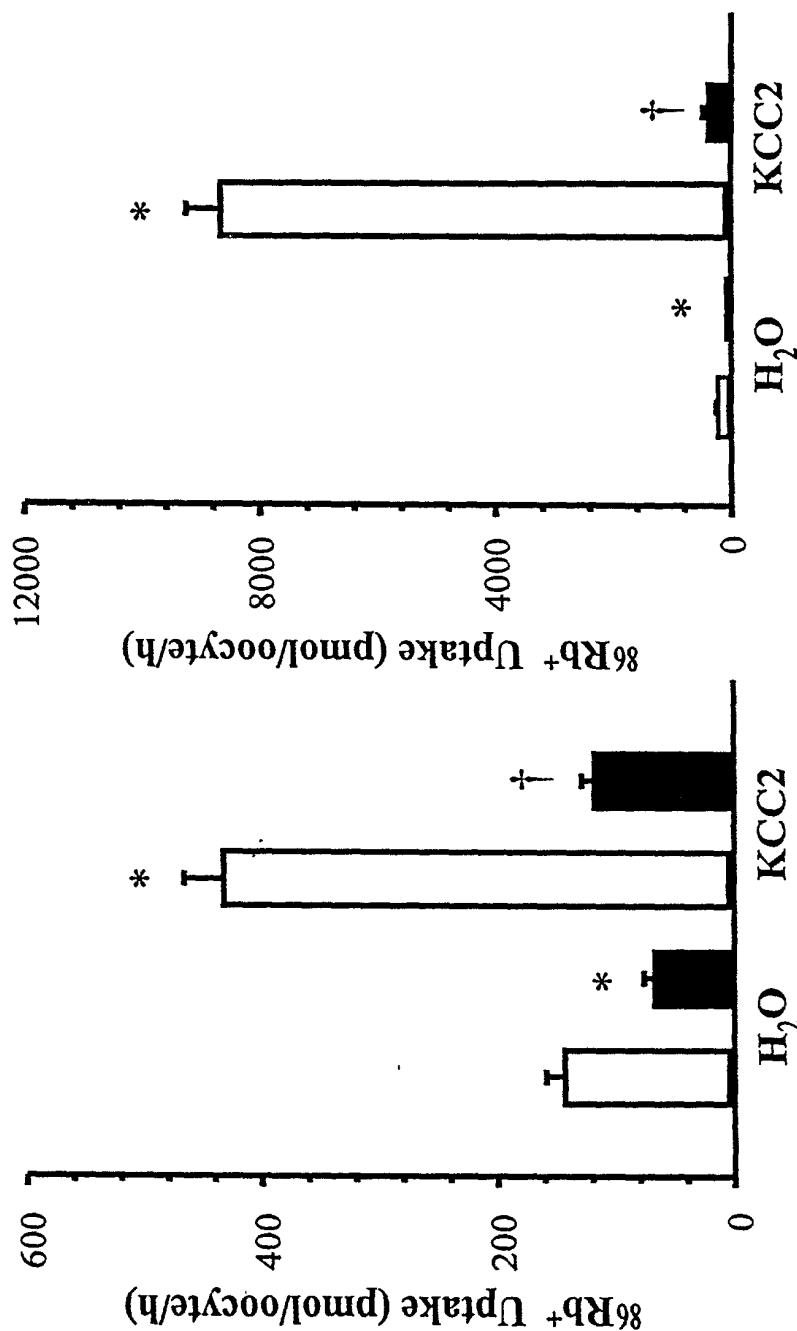


FIG. 7A
FIG. 7B

COPY

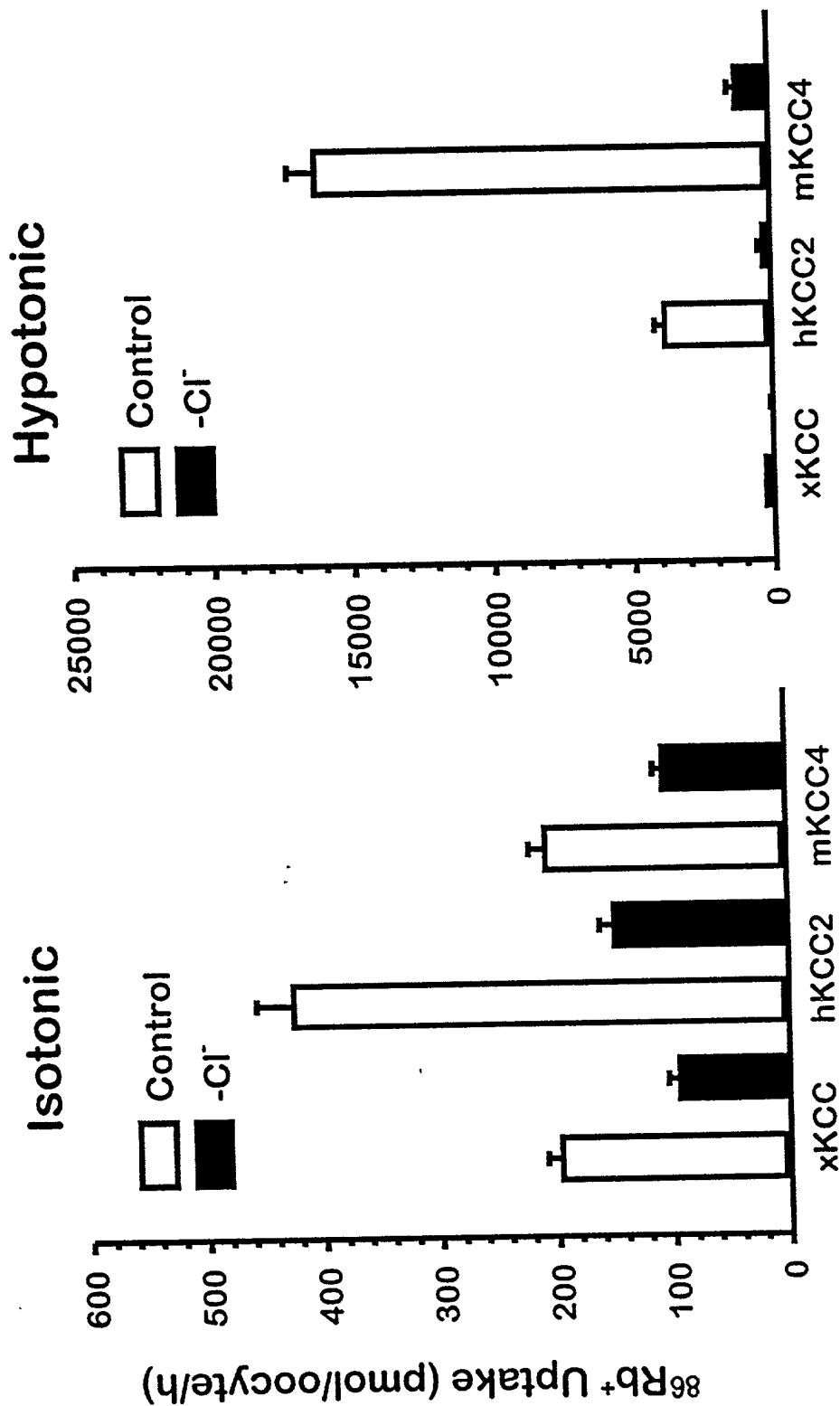


FIG. 8

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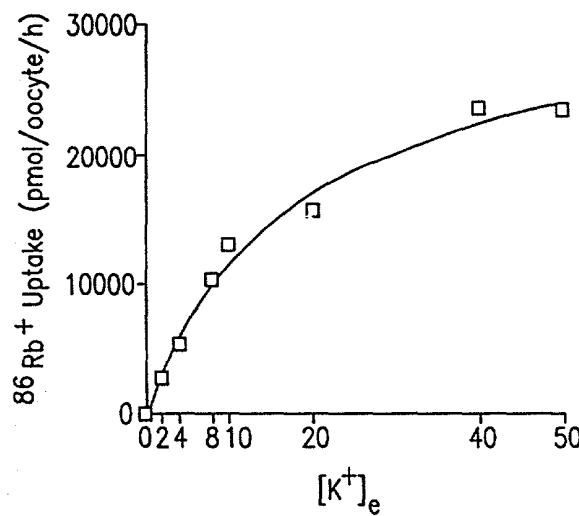


FIG. 9A

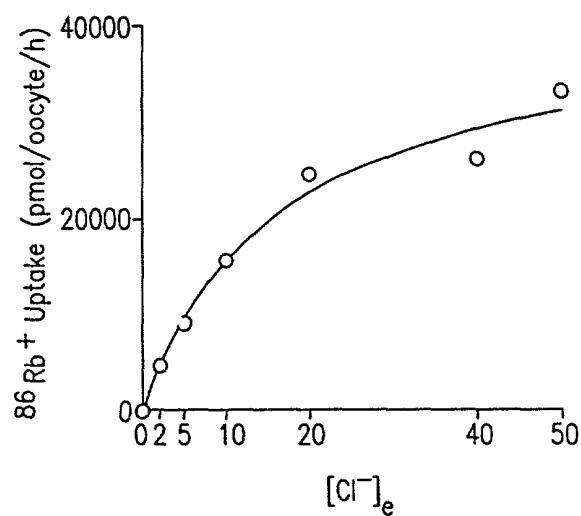


FIG. 9B

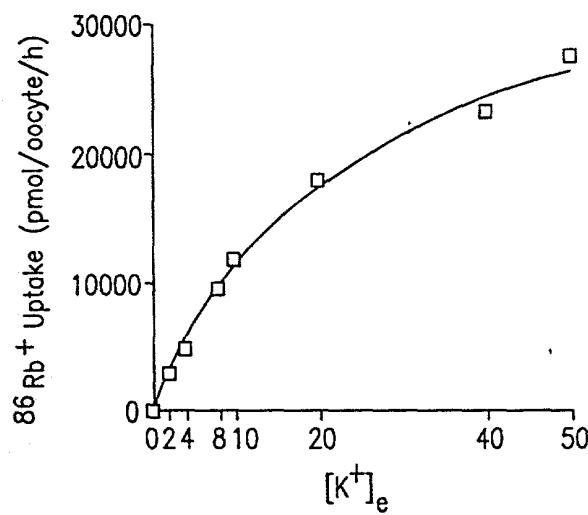


FIG. 9C

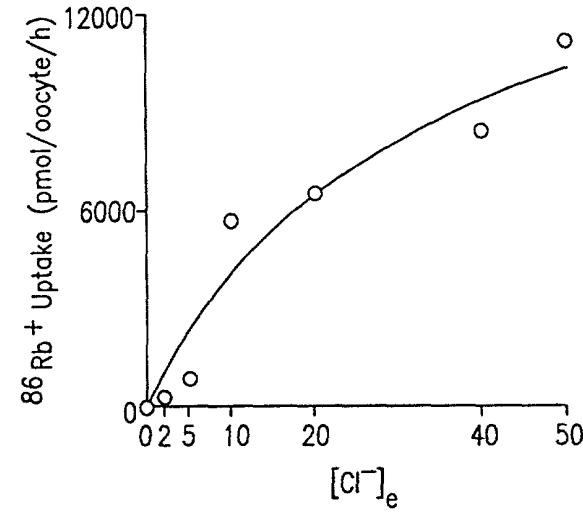


FIG. 9D

COPY

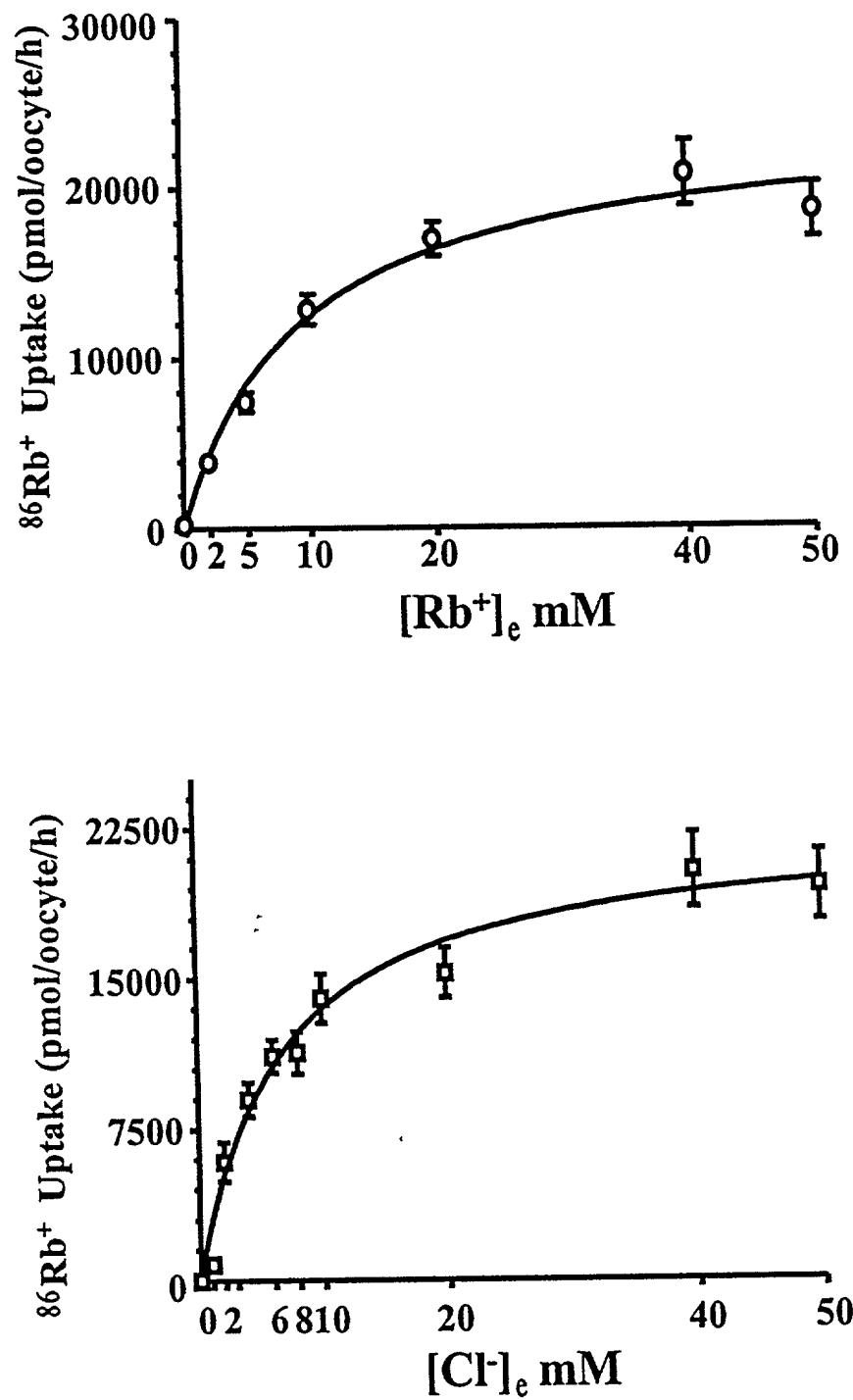


FIG. 10

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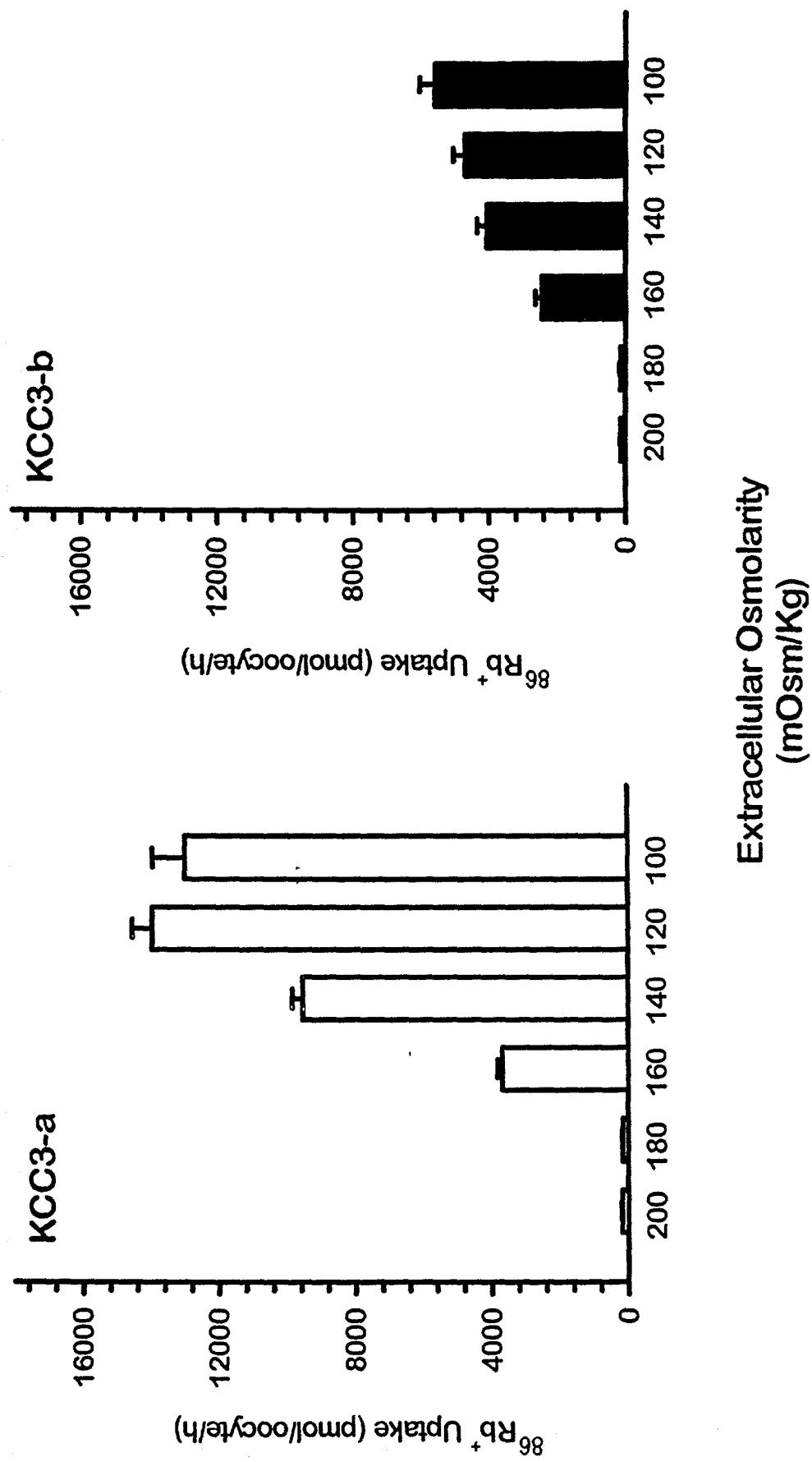


FIG. 11

COPY

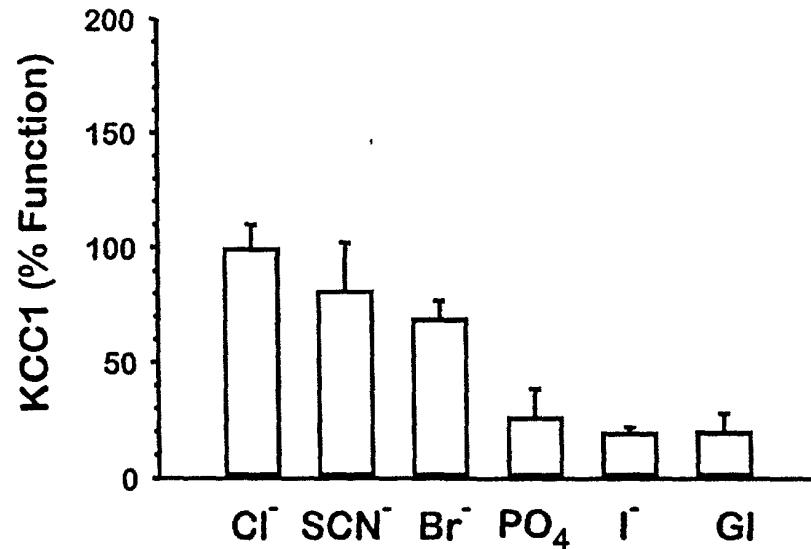
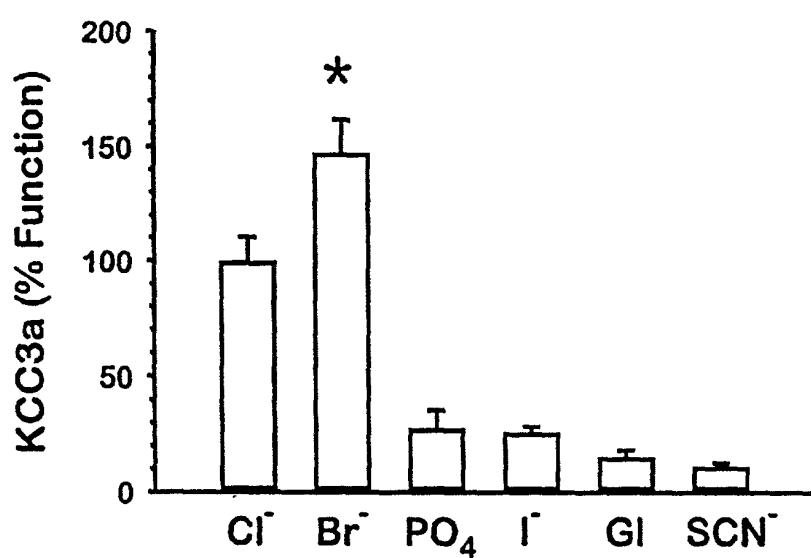
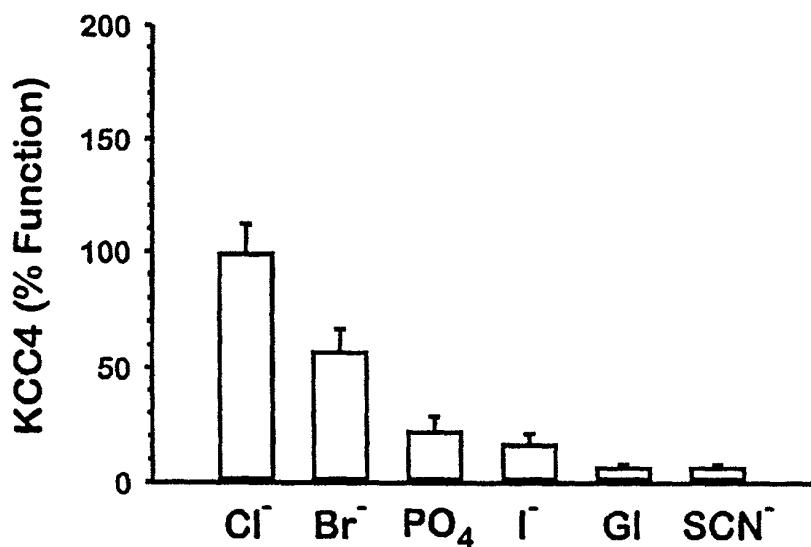


FIG. 12

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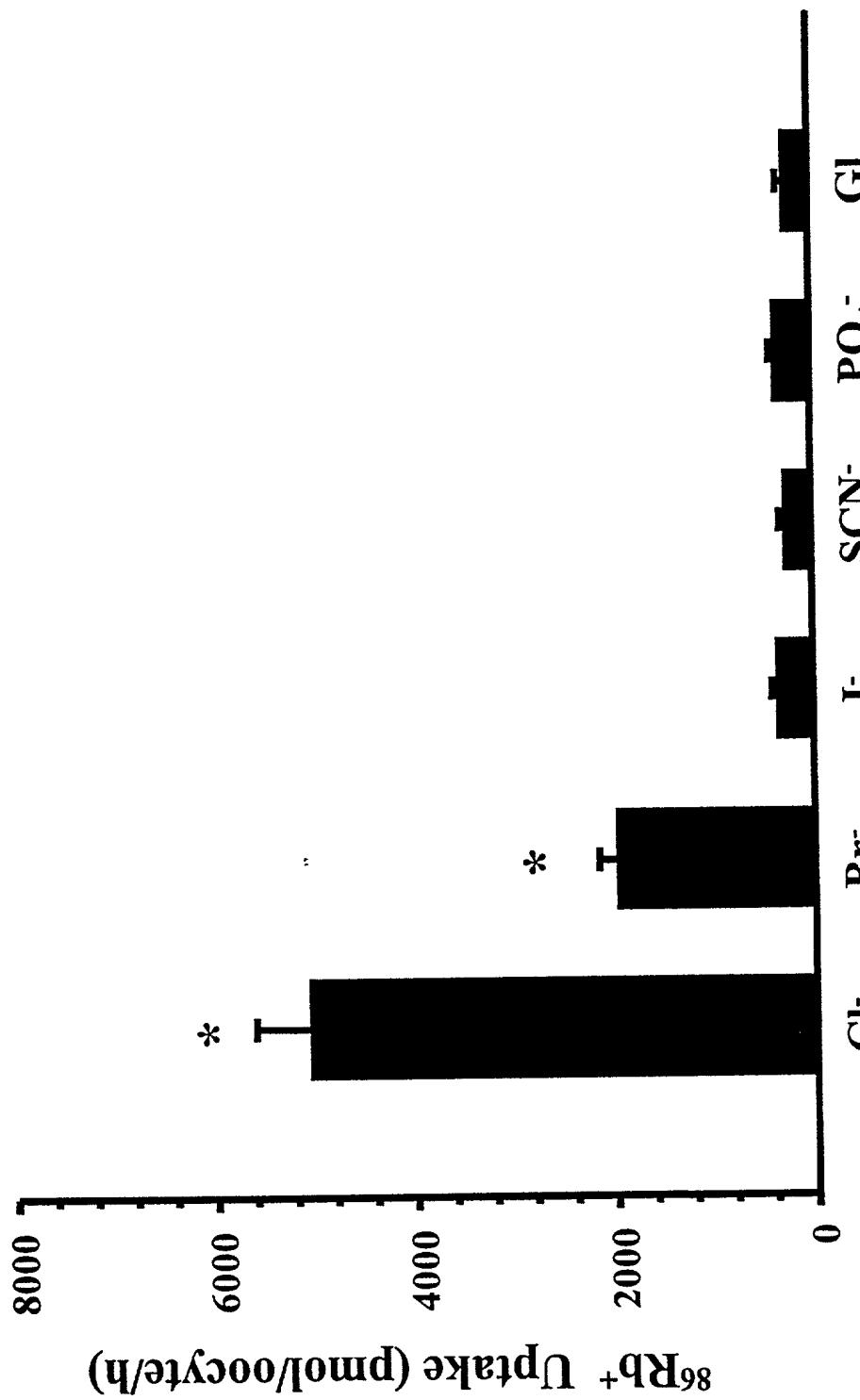


FIG. 13

COPY

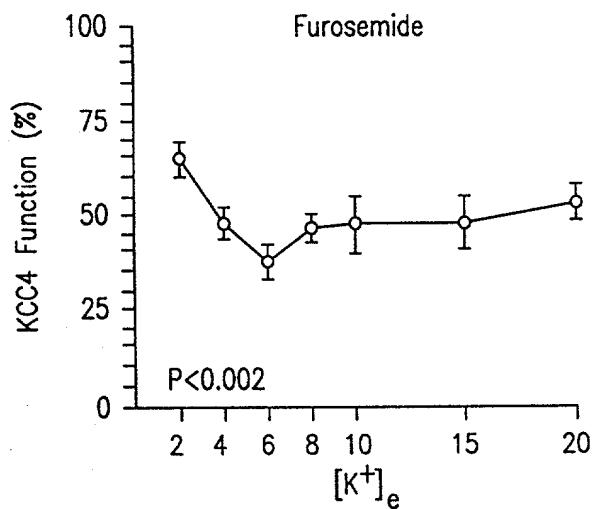


FIG. 14A

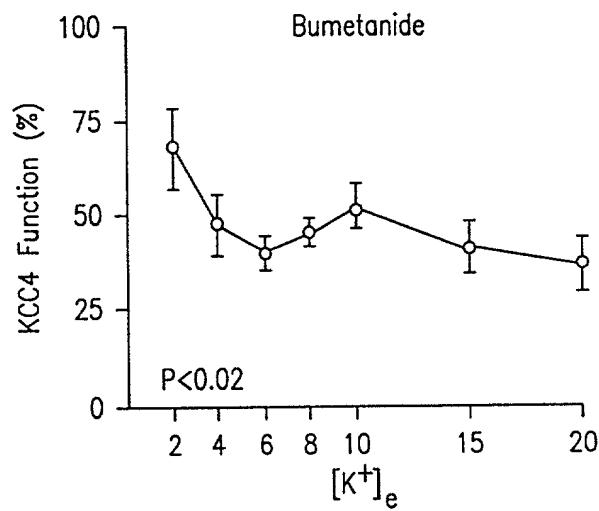


FIG. 14B

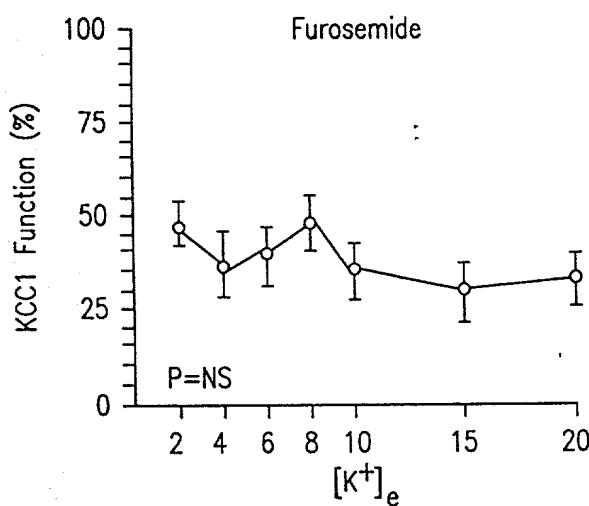


FIG. 14C

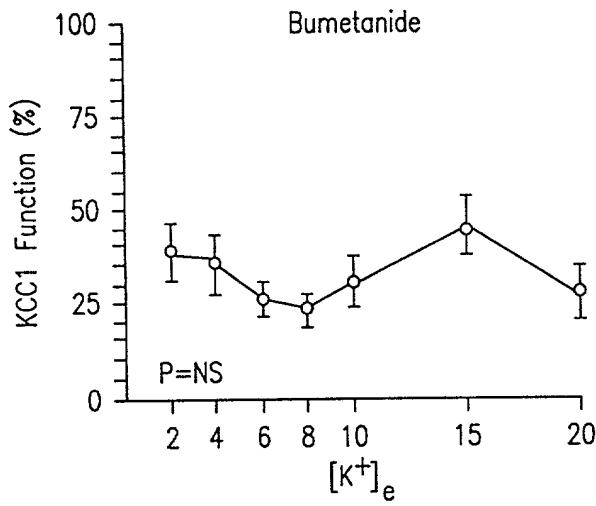


FIG. 14D

COPY

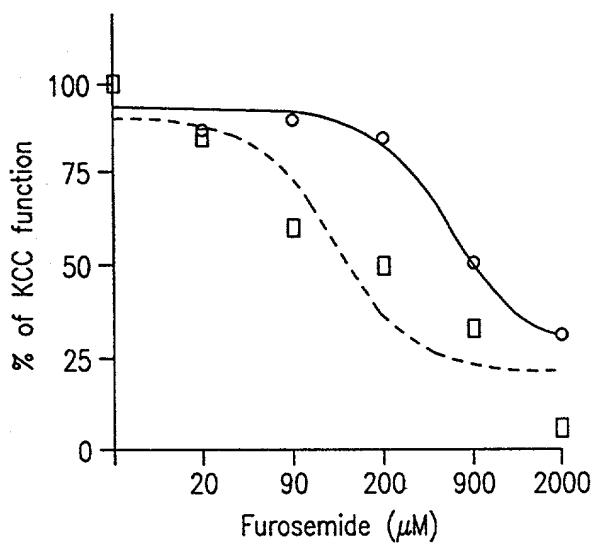


FIG. 15A

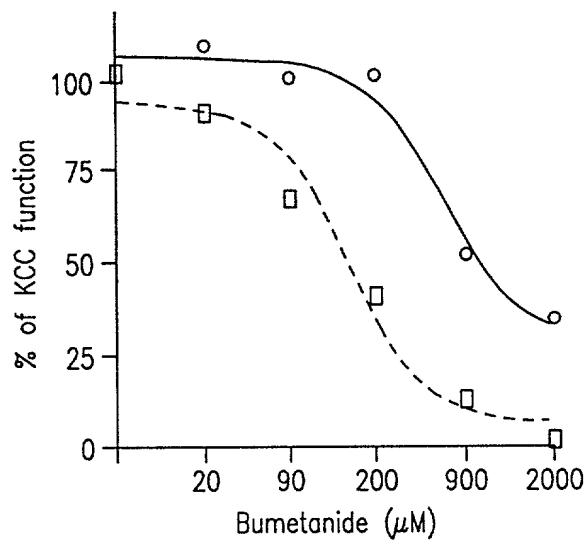


FIG. 15B

COPY

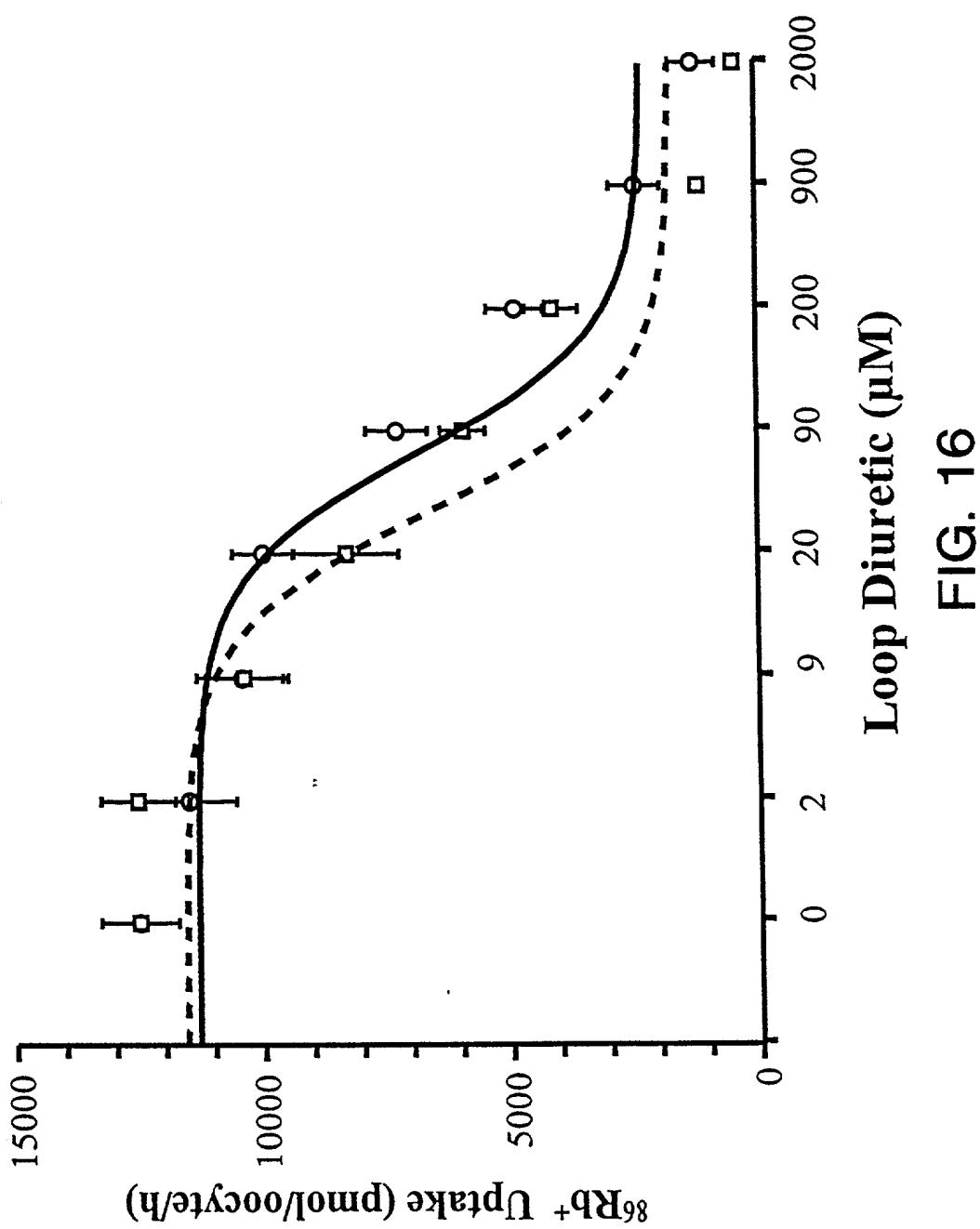


FIG. 16

COPY

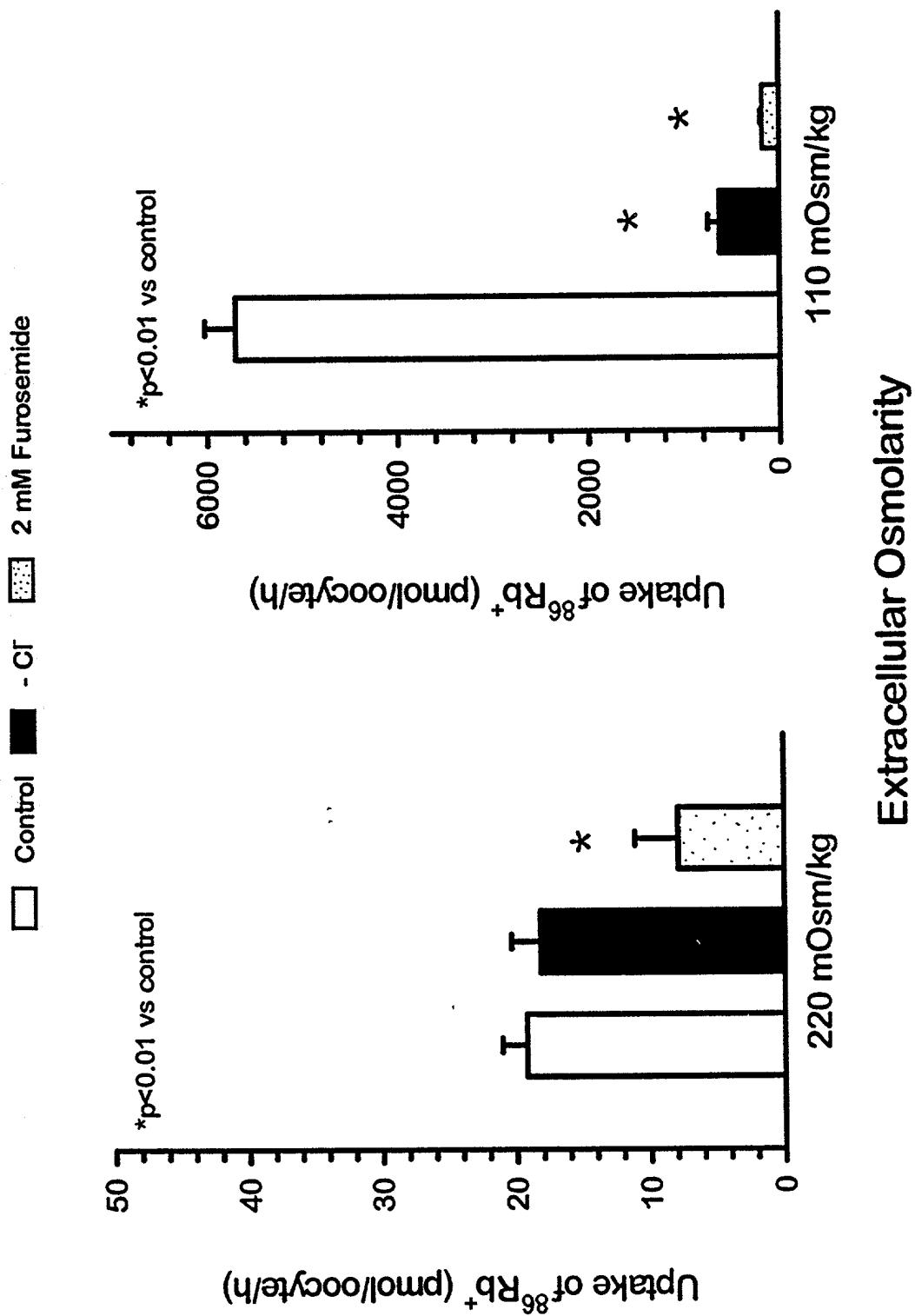


FIG. 17

COPY

DIDS (100 μ M)

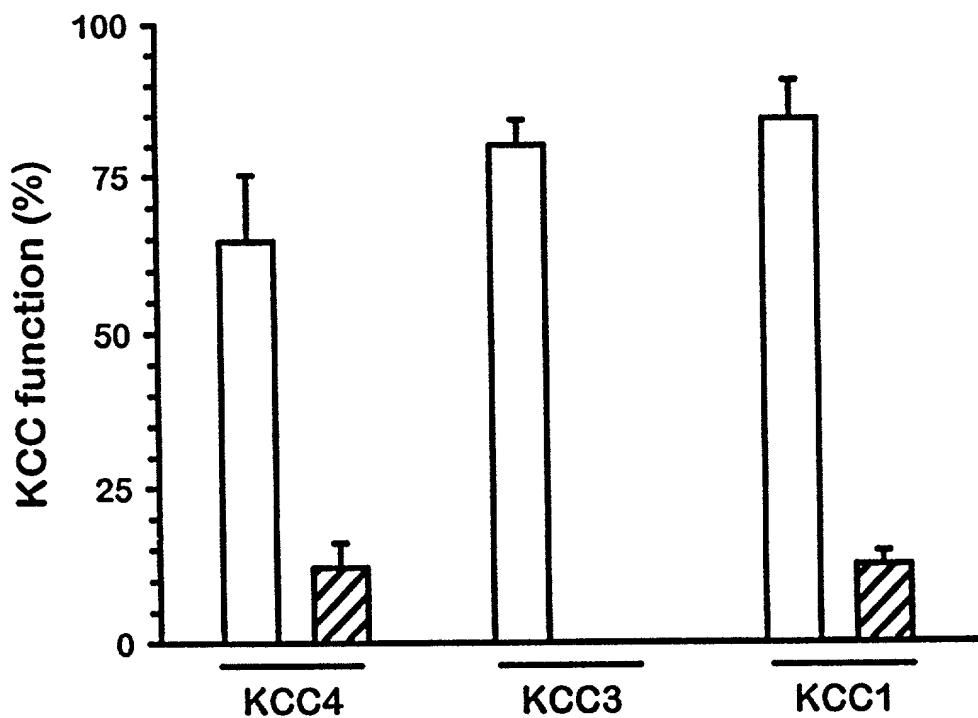


FIG. 18A

DIOA (100 μ M)

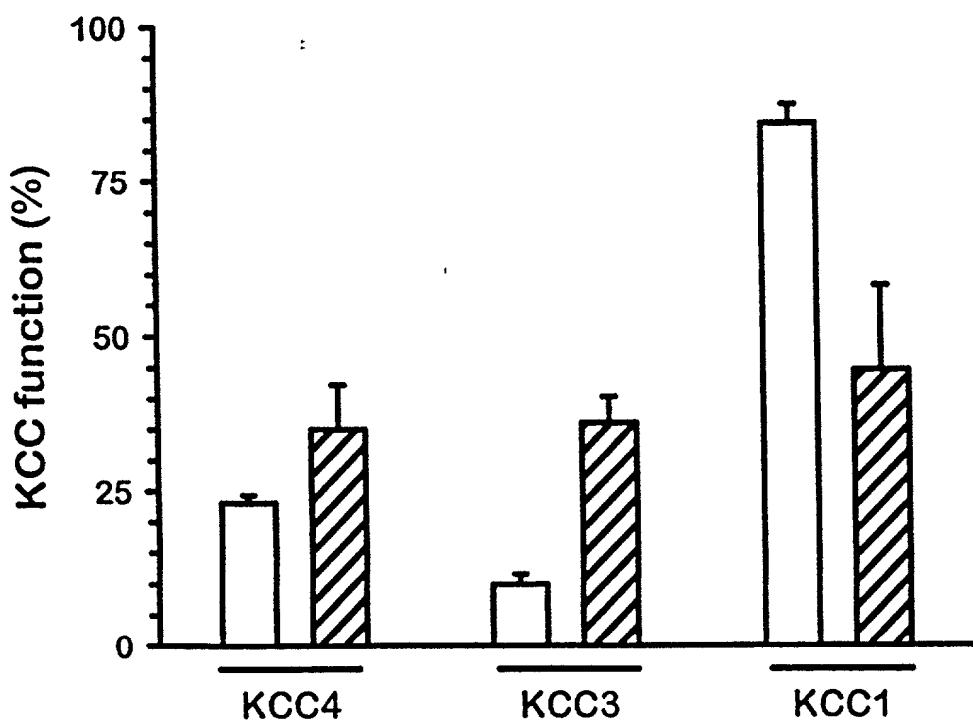


FIG. 18B

COPY

SEARCHED INDEXED SERIALIZED FILED

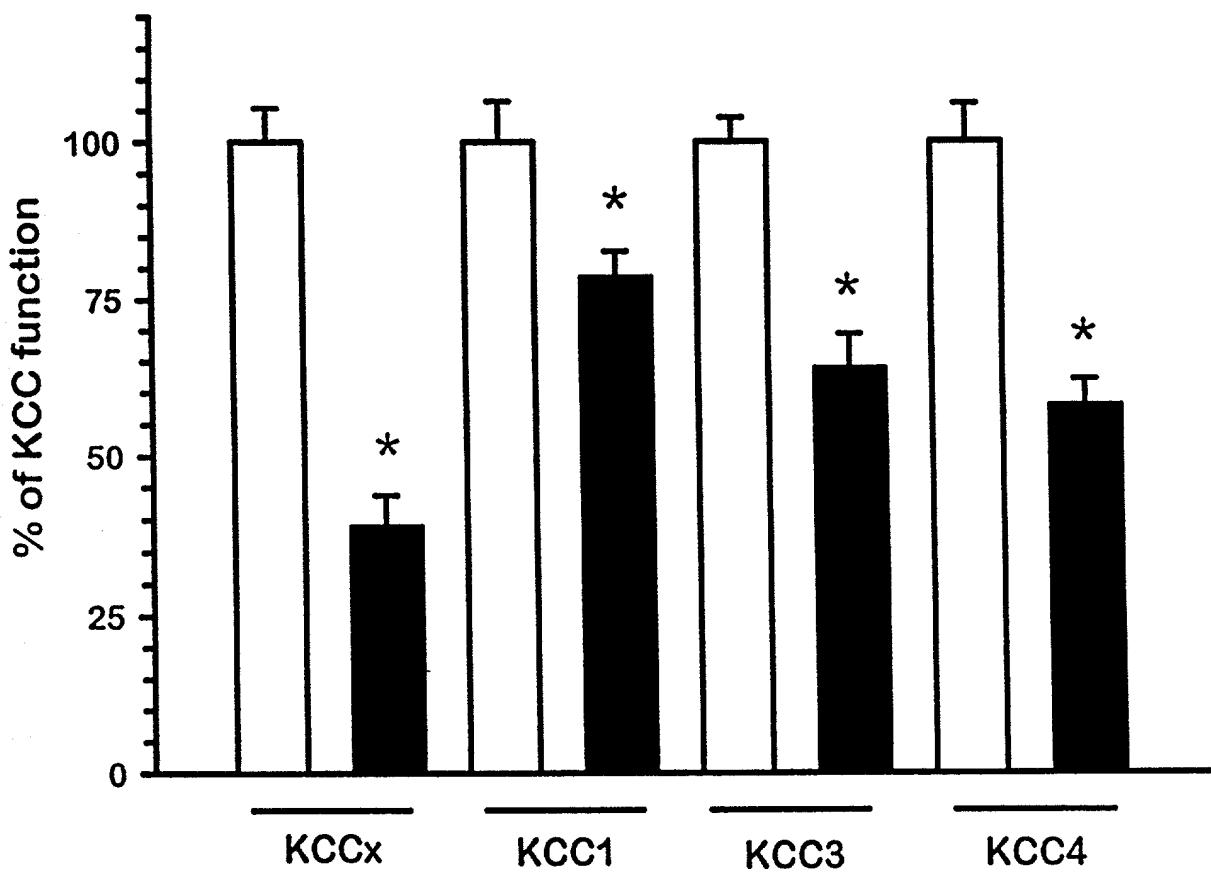


FIG. 19

COPY

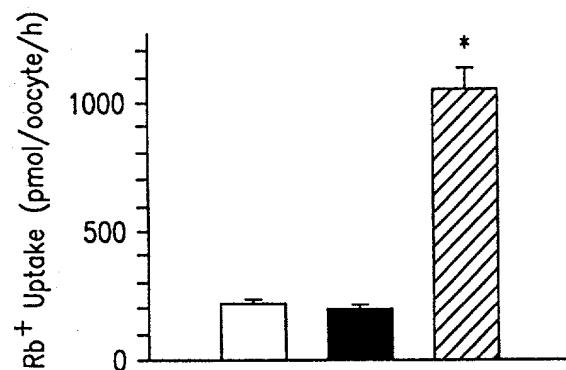


FIG. 20A

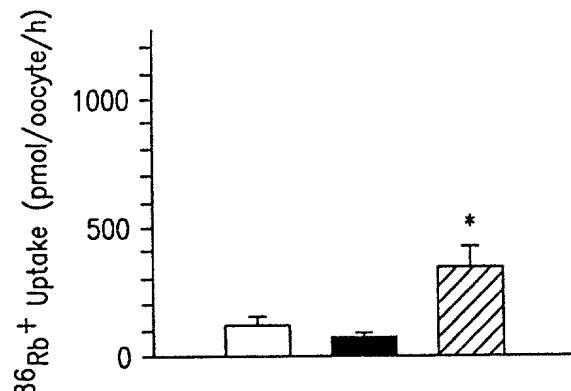


FIG. 20B

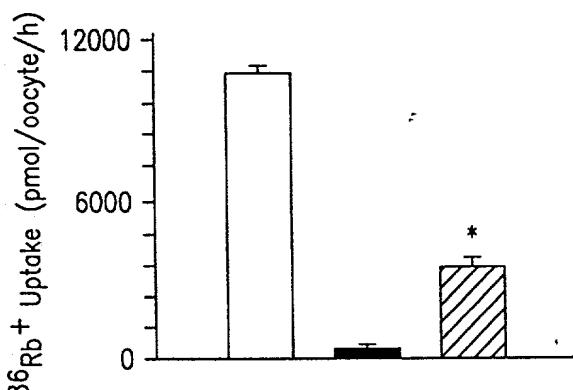


FIG. 20C

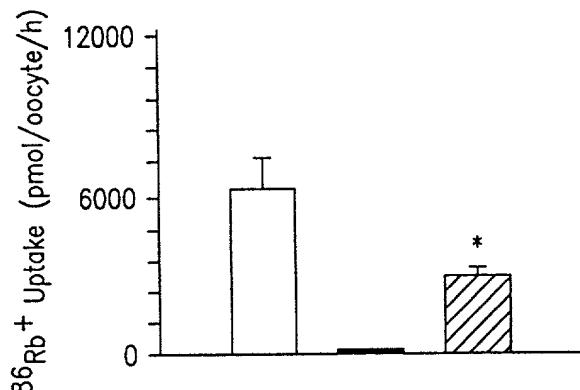
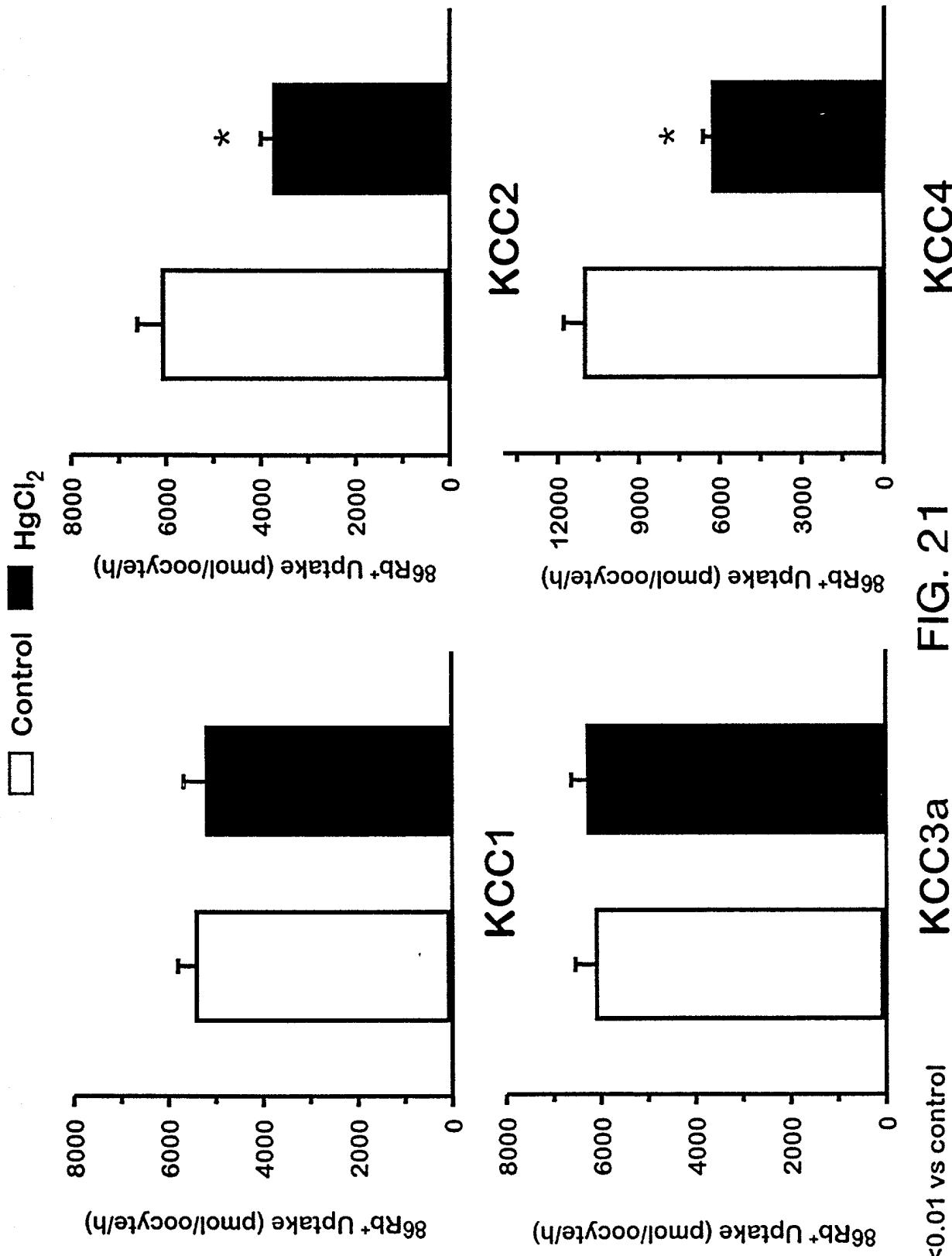
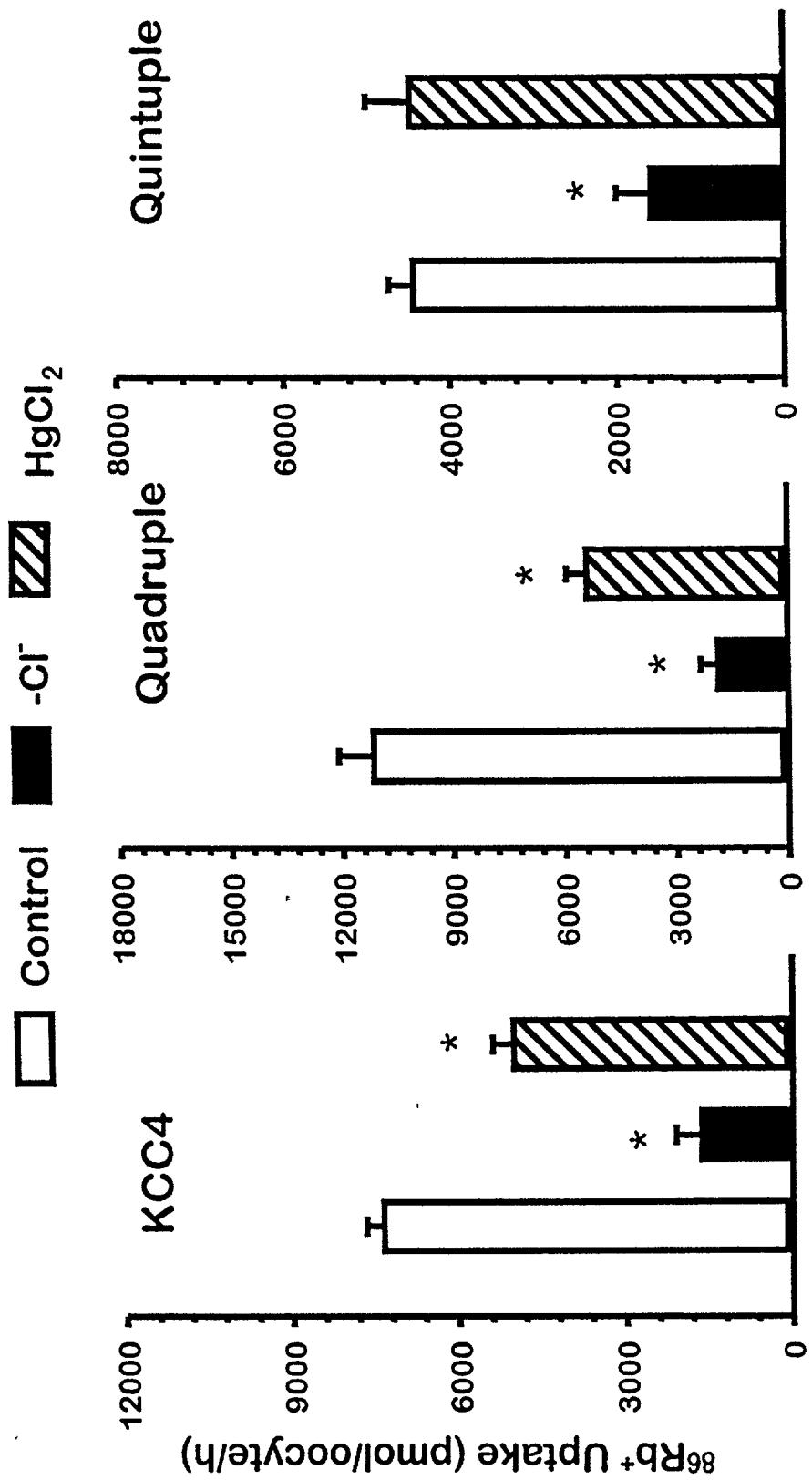


FIG. 20D

COPY



COPY



*p<0.01 vs control

FIG. 22

COPY

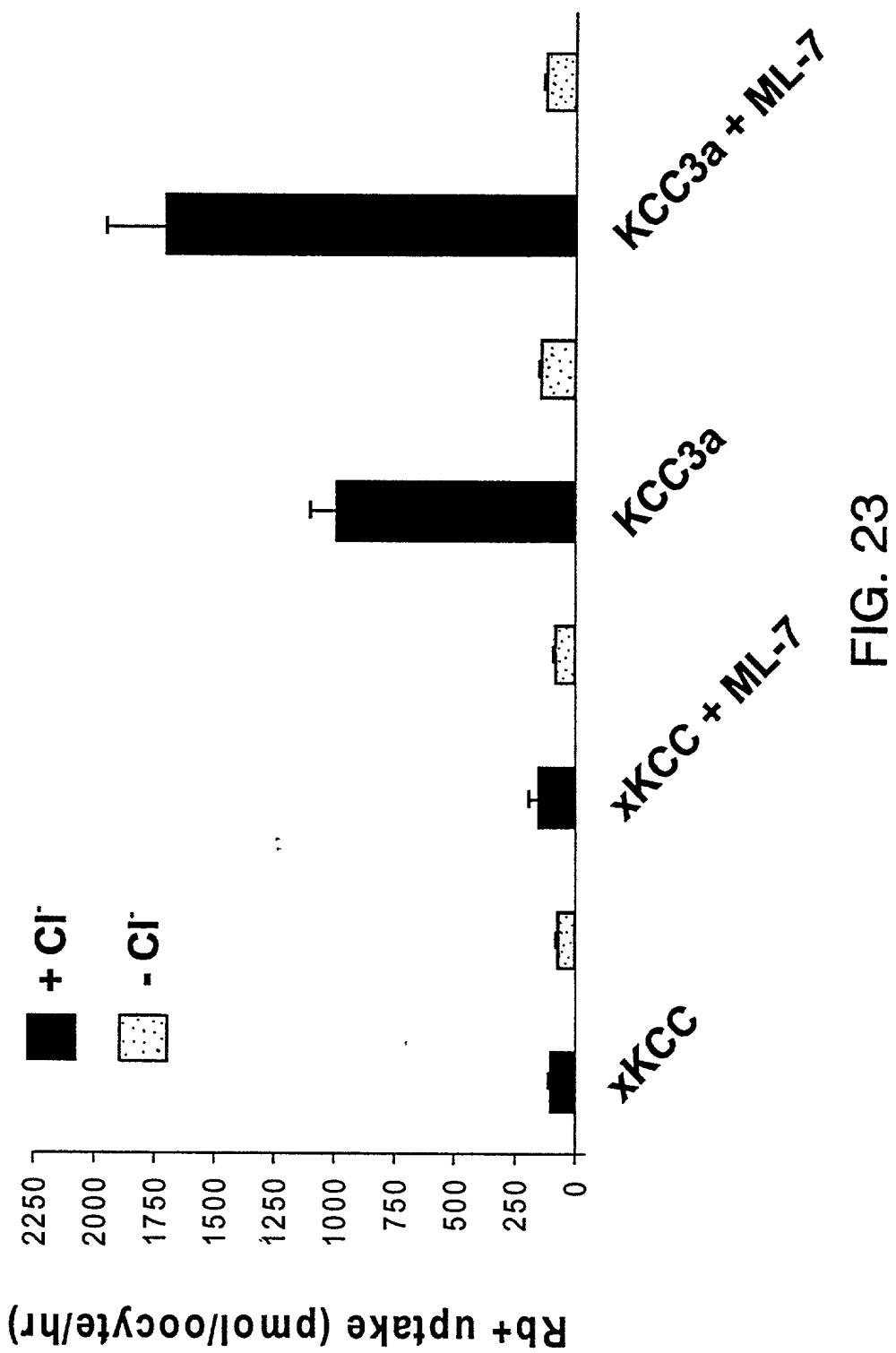


FIG. 23

COPY

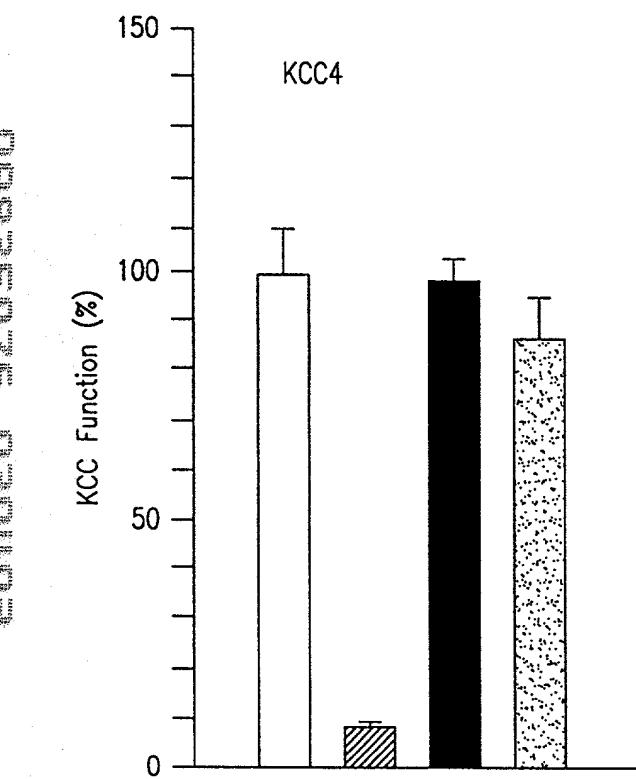


FIG. 24A

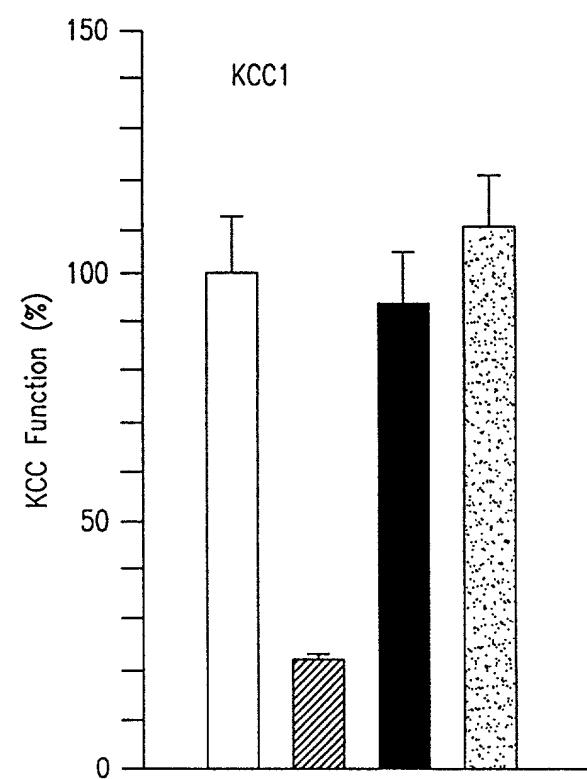


FIG. 24B

COPY

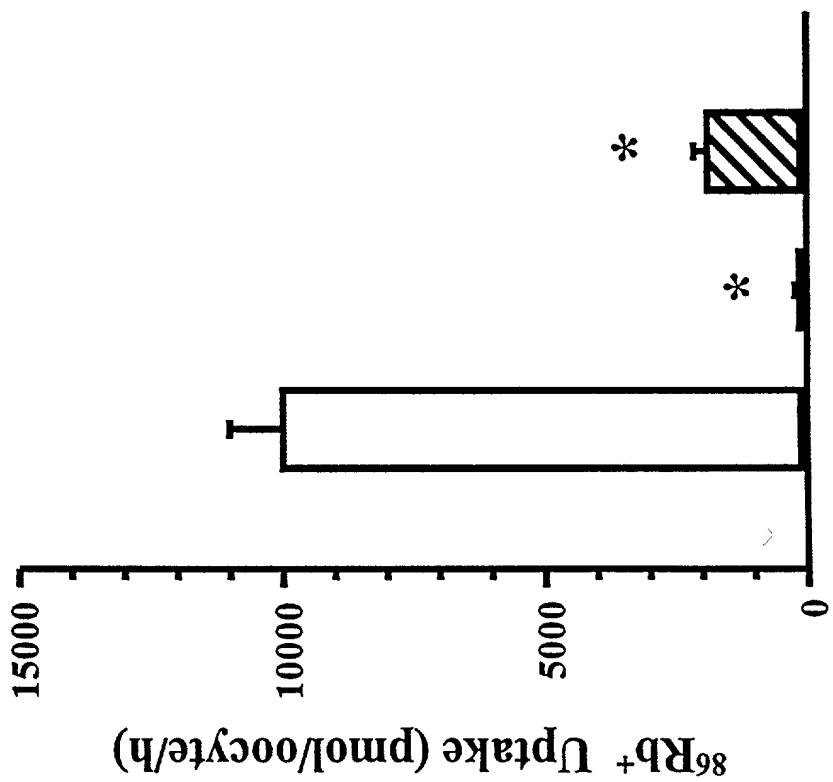


FIG. 25B

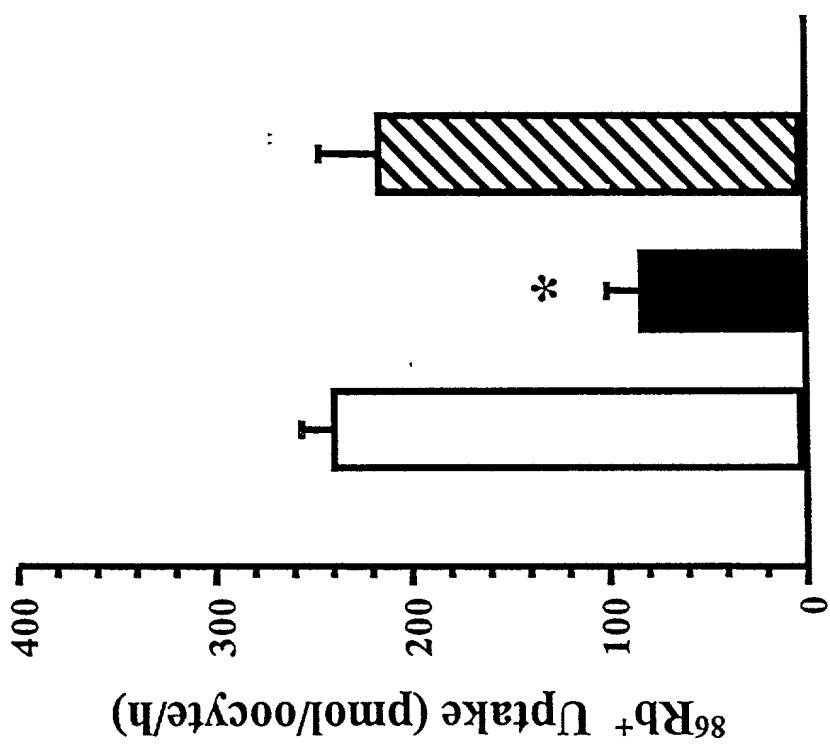
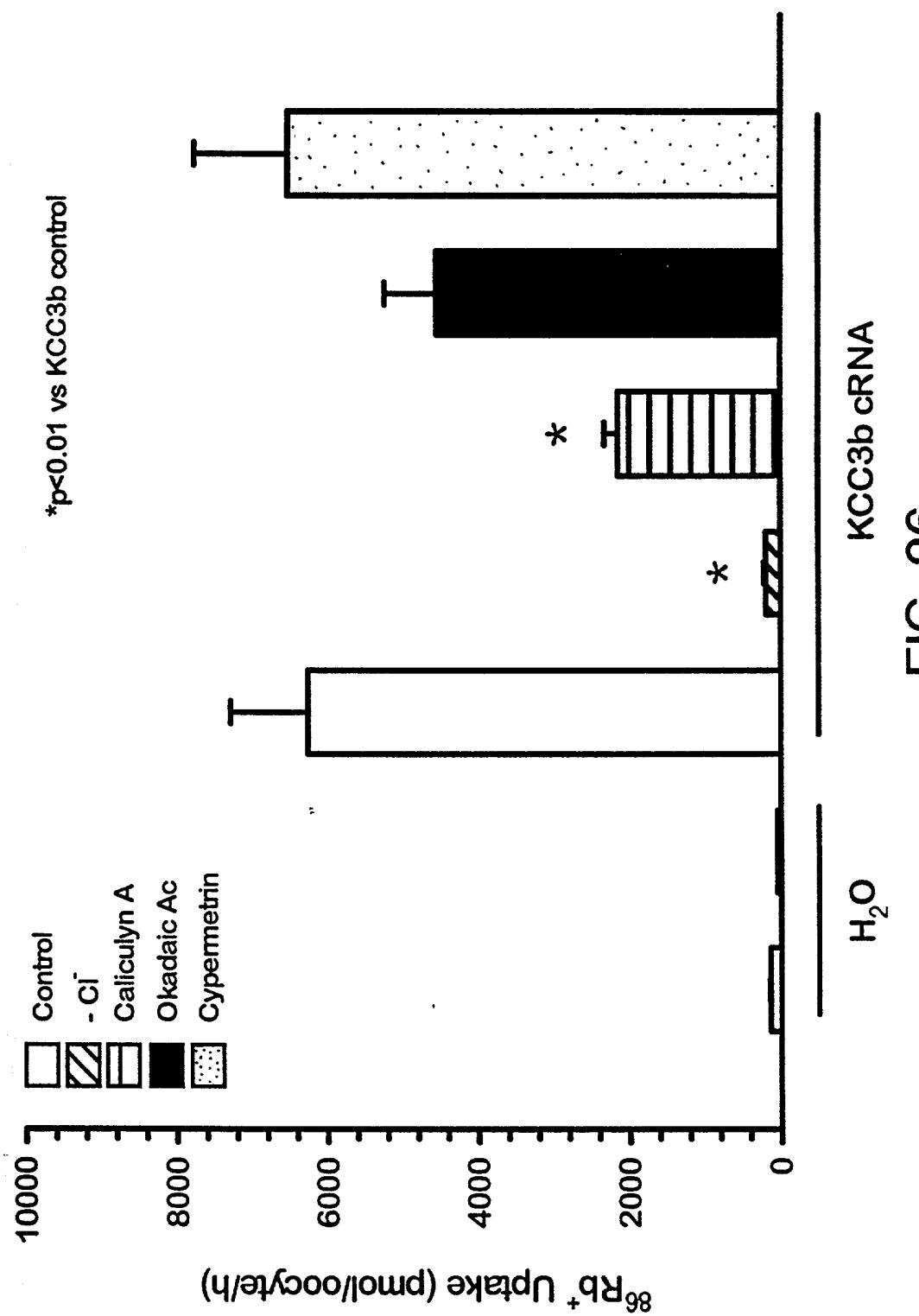


FIG. 25A

COPY



COPY

KCC2/NT2-N

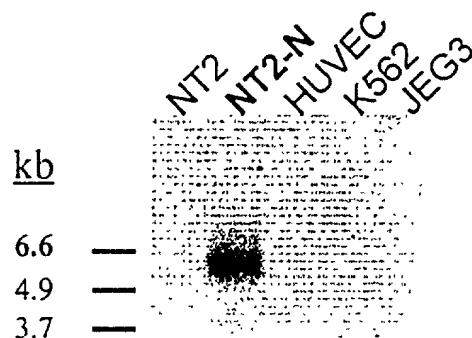


FIG. 27A

Mouse KCC3

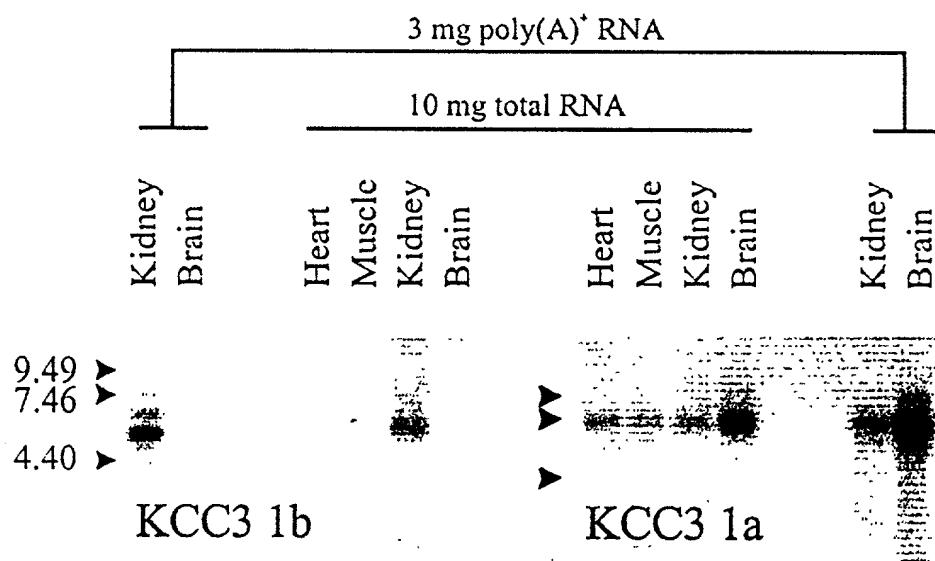


FIG. 27B

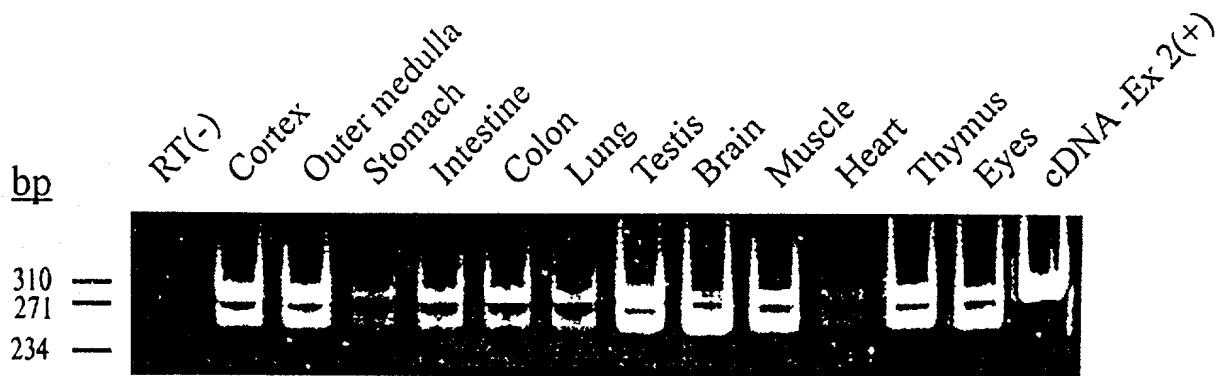


FIG. 27C

COPY

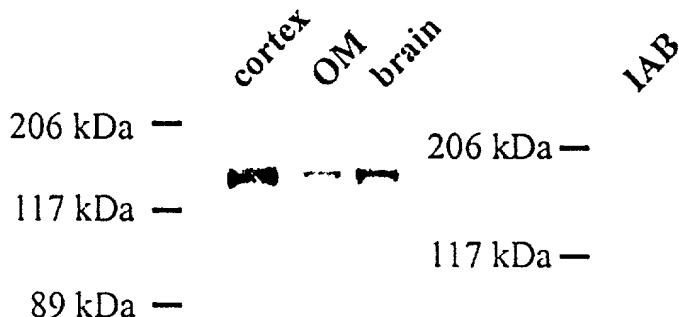


FIG. 27D

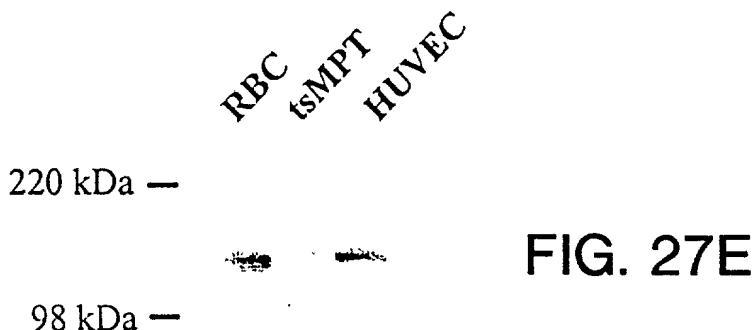


FIG. 27E

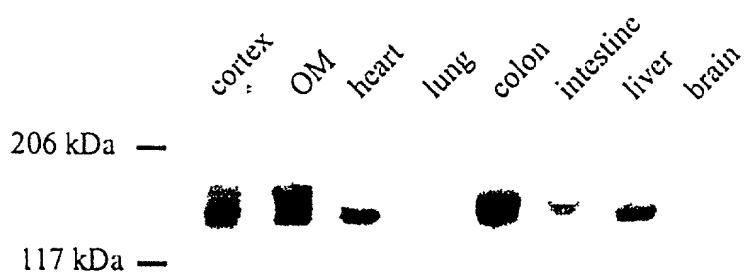


FIG. 27F

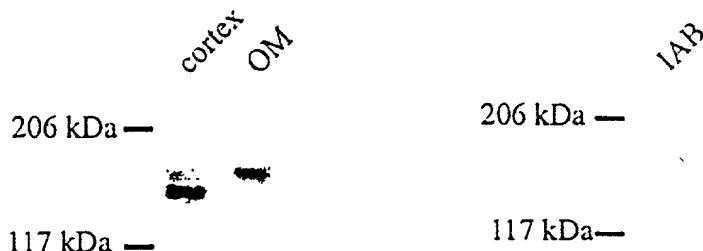
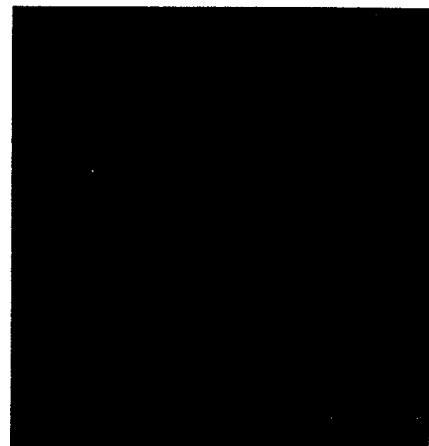


FIG. 27G

FIG. 27H

Title: Purified and Isolated Potassium-Chloride Cotransporter
Nucleic Acids and Polypeptides and Therapeutic and
Screening Methods Using Same
Applicant(s): Mount et al.
Serial No.: 09/835,976

COPY



+/-

FIG. 27J

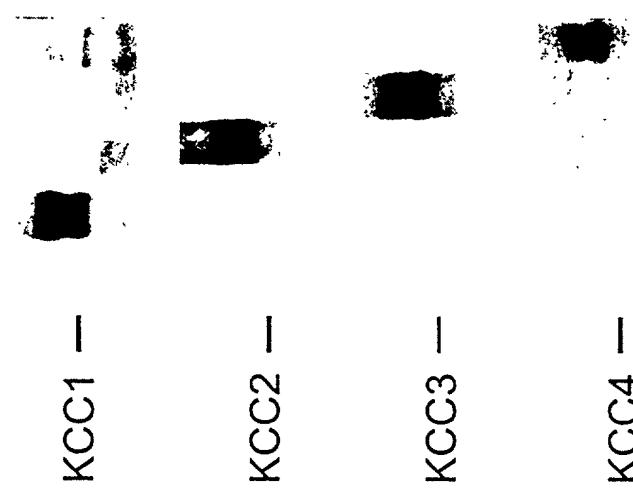


FIG. 27I

COPY

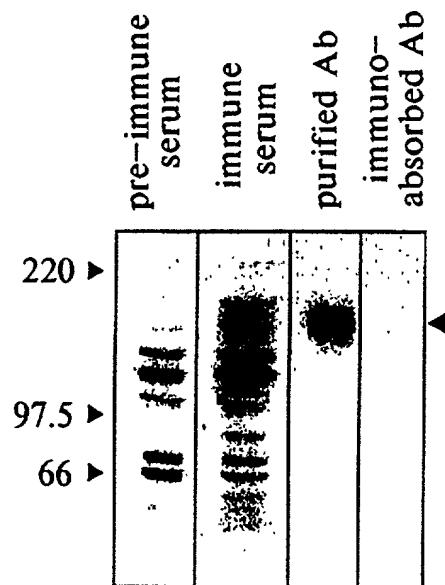


FIG. 28

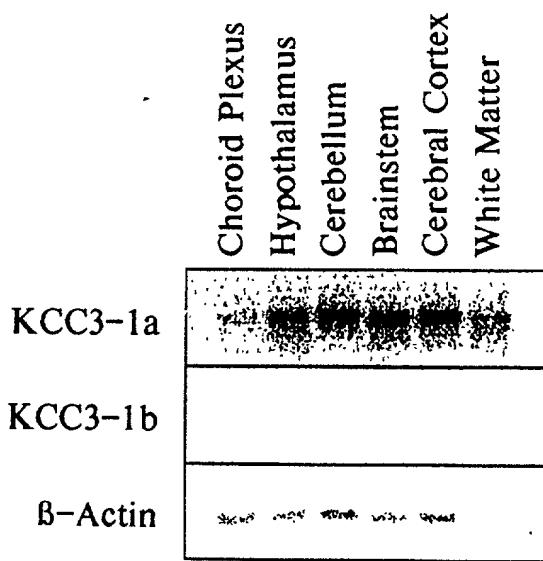


FIG. 29

COPY

FIG. 30A

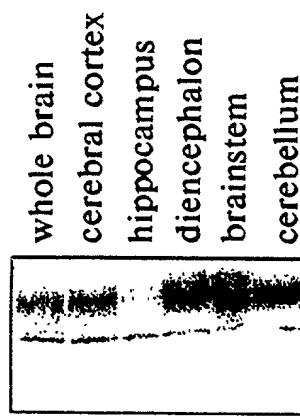


FIG. 30B

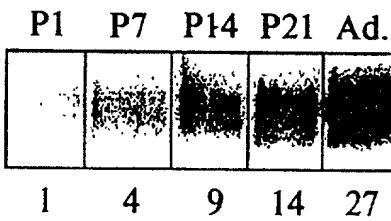
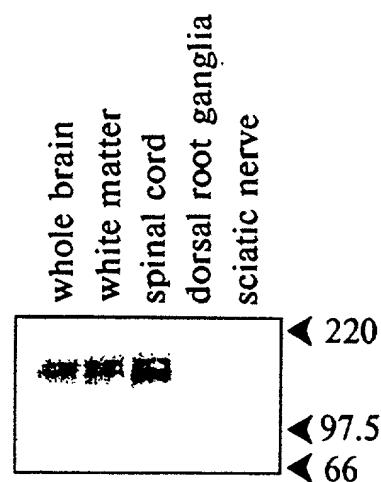


FIG. 30C

COPY

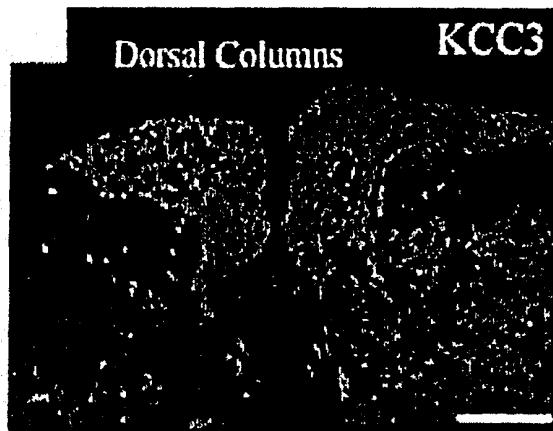


FIG. 31A

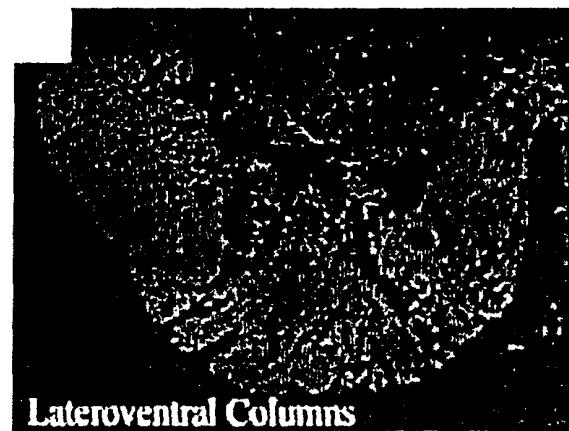


FIG. 31D

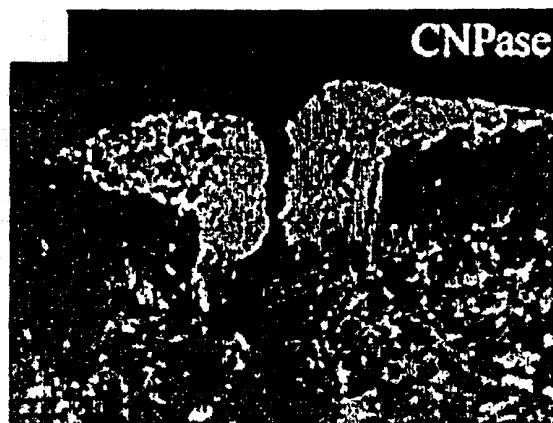


FIG. 31B

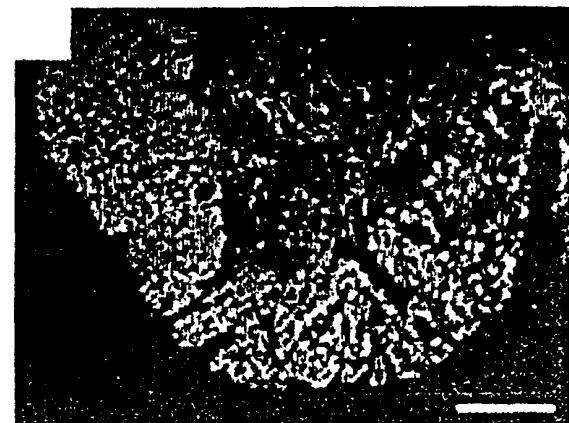


FIG. 31E

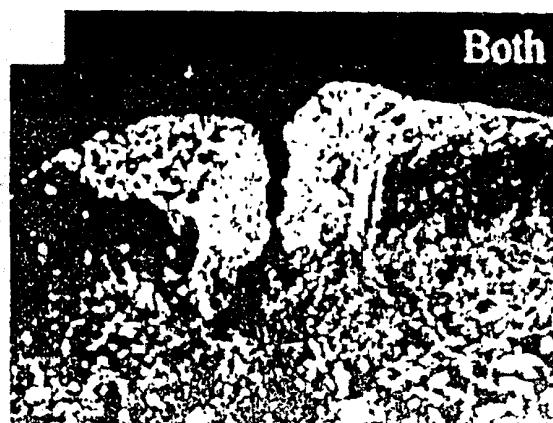


FIG. 31C

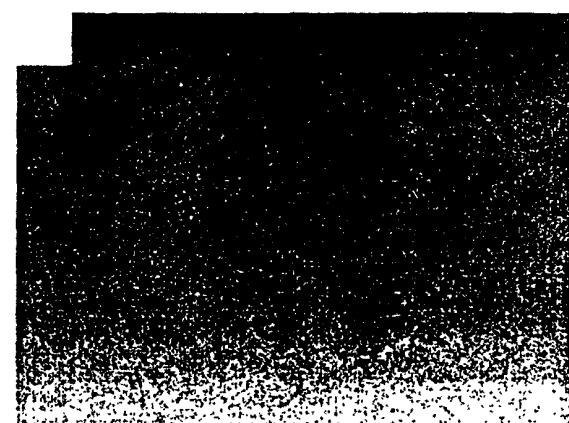


FIG. 31F

Title: Purified and Isolated Potassium-Chloride Cotransporter
Nucleic Acids and Polypeptides and Therapeutic and
Screening Methods Using Same
Applicant(s): Mount et al.
Serial No.: 09/835,976

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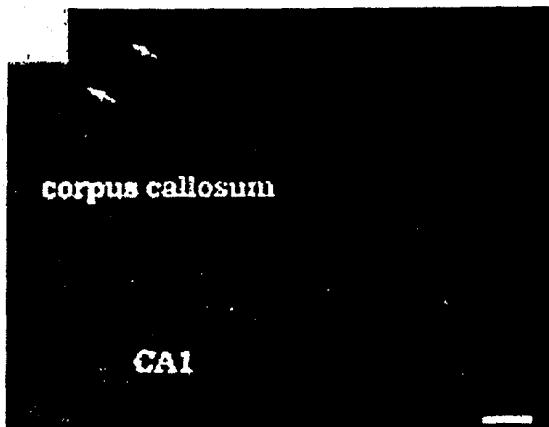


FIG. 32A

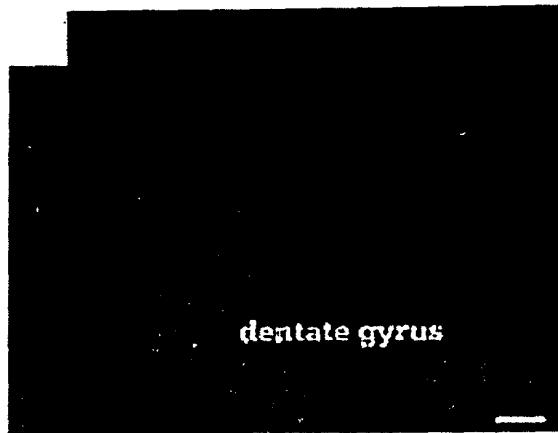


FIG. 32D

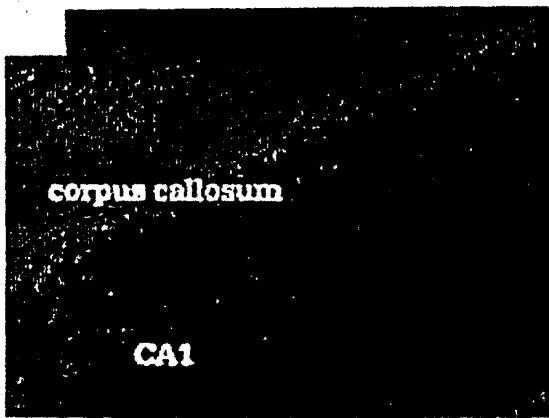


FIG. 32B



FIG. 32E

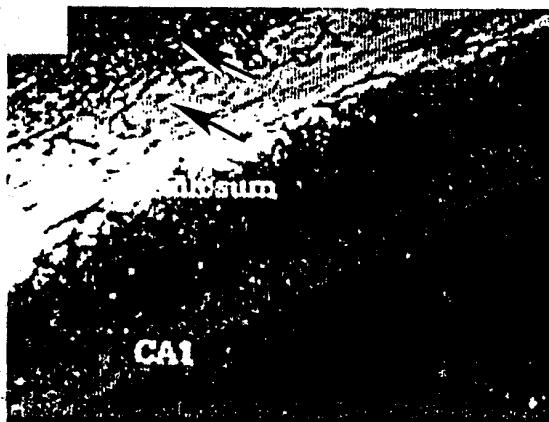


FIG. 32C

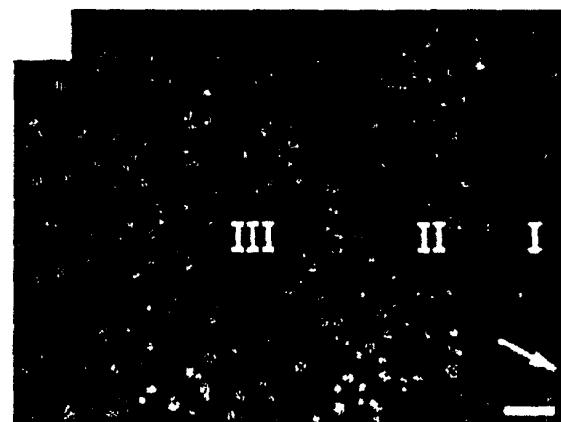


FIG. 32F

COPY

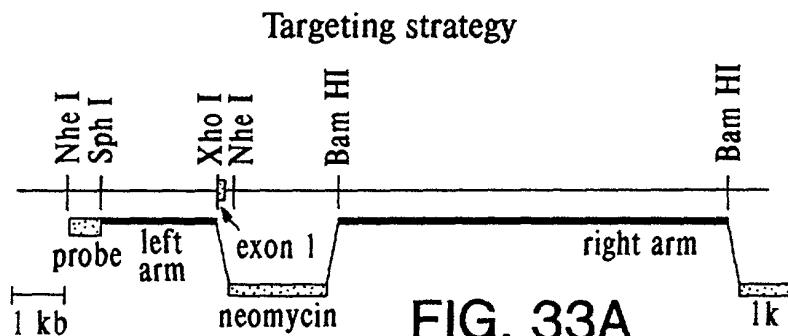


FIG. 33A

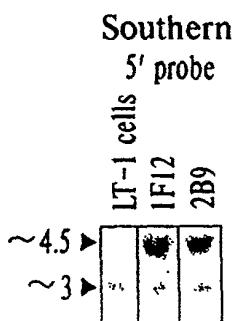


FIG. 33B

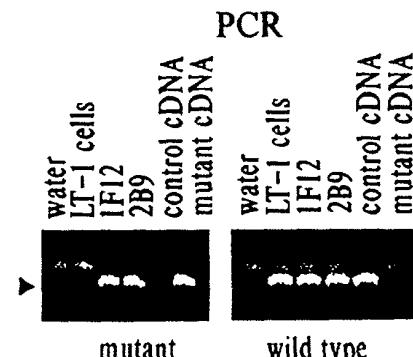


FIG. 33C

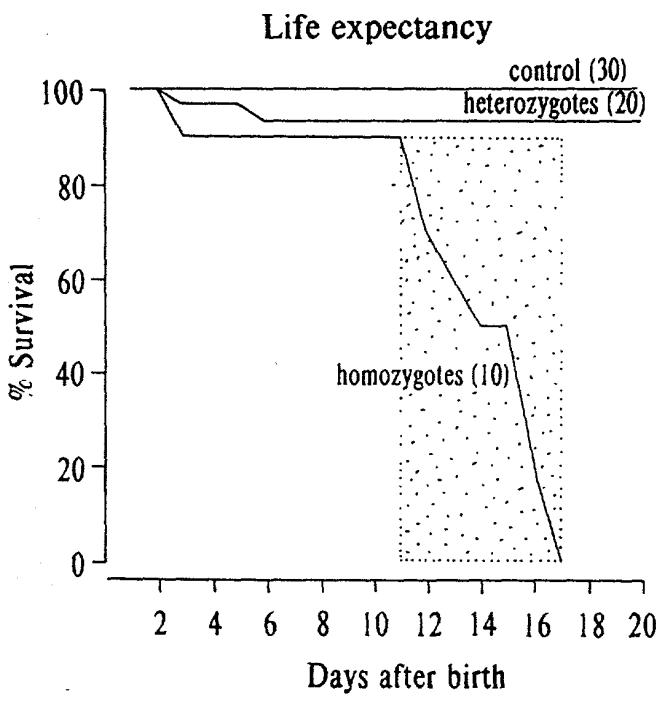


FIG. 33D



FIG. 33E

COPY

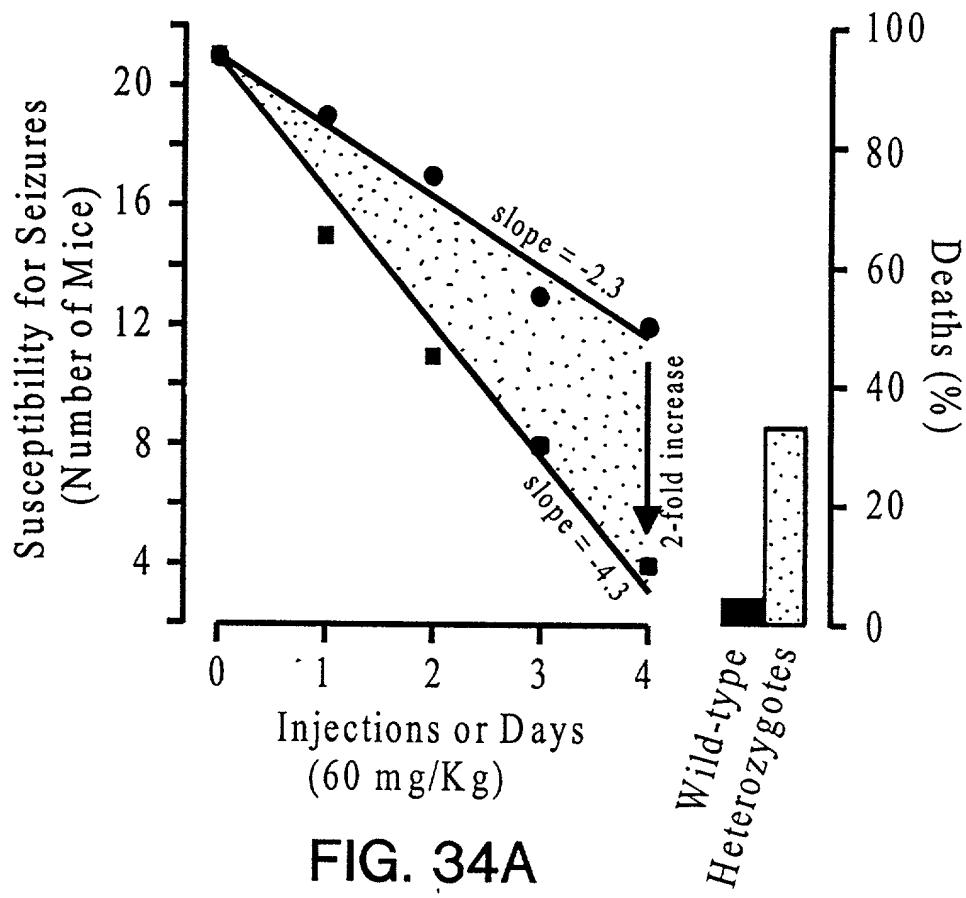


FIG. 34B

COPY

KCC3 Construct

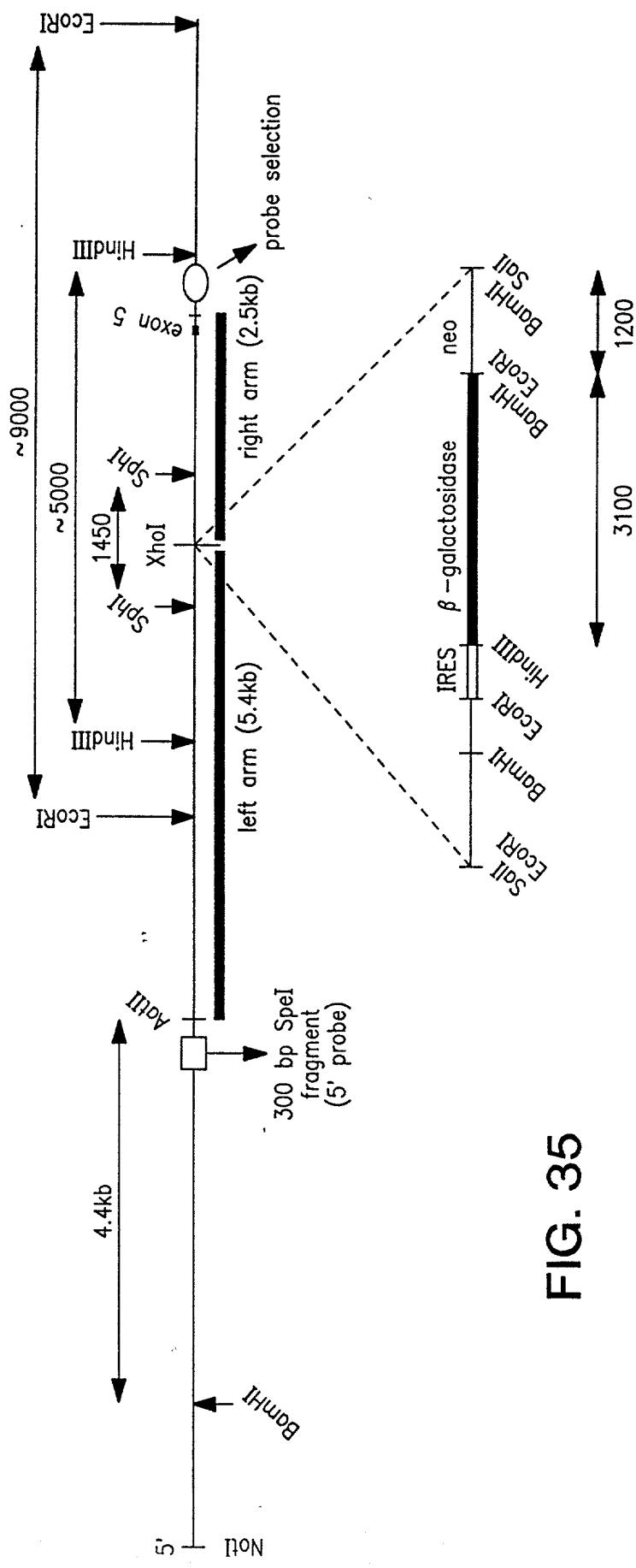


FIG. 35

COPY

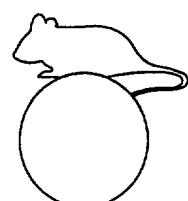
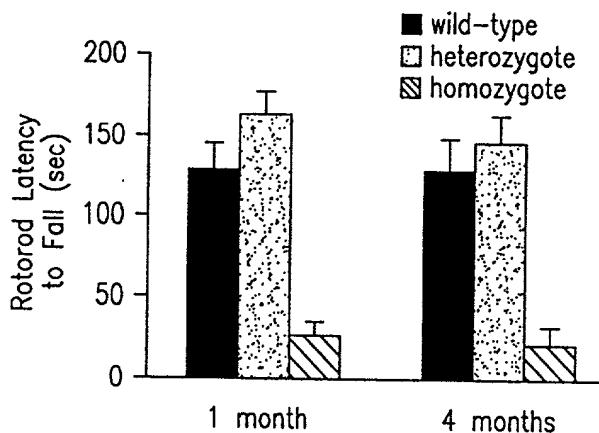


FIG. 36A

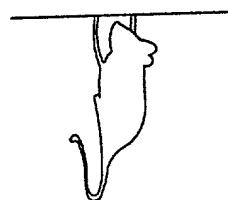
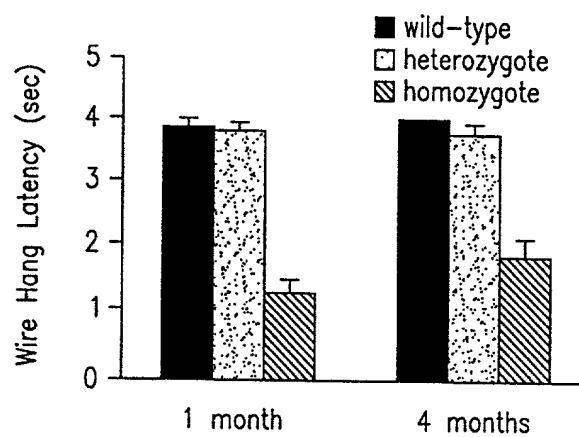


FIG. 36B

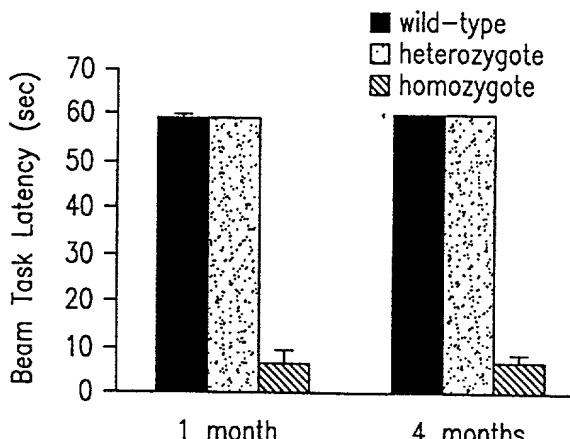


FIG. 36C

COPY

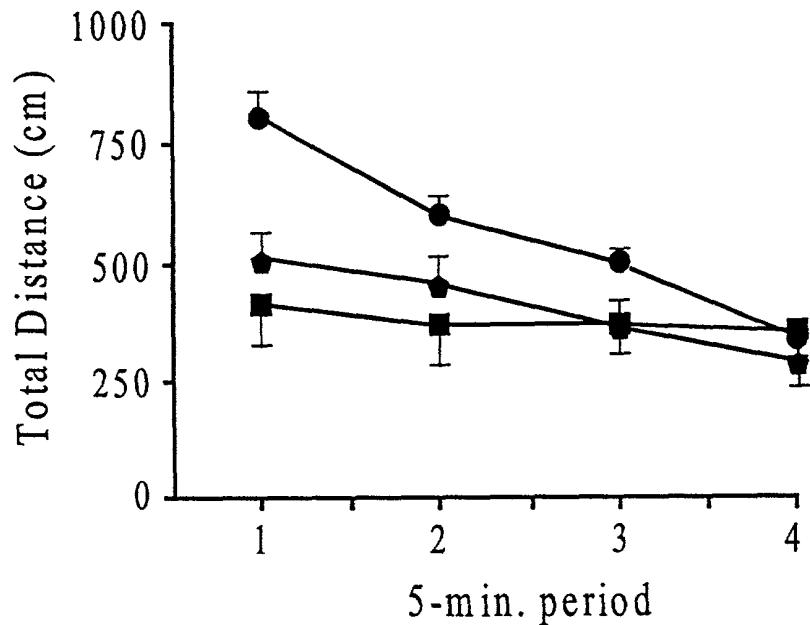


FIG. 37A

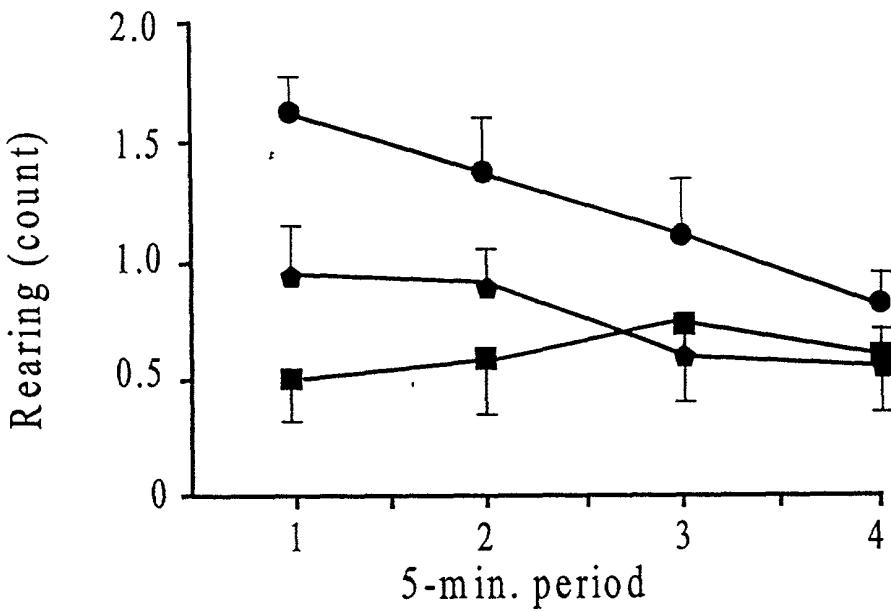


FIG. 37B

COPY

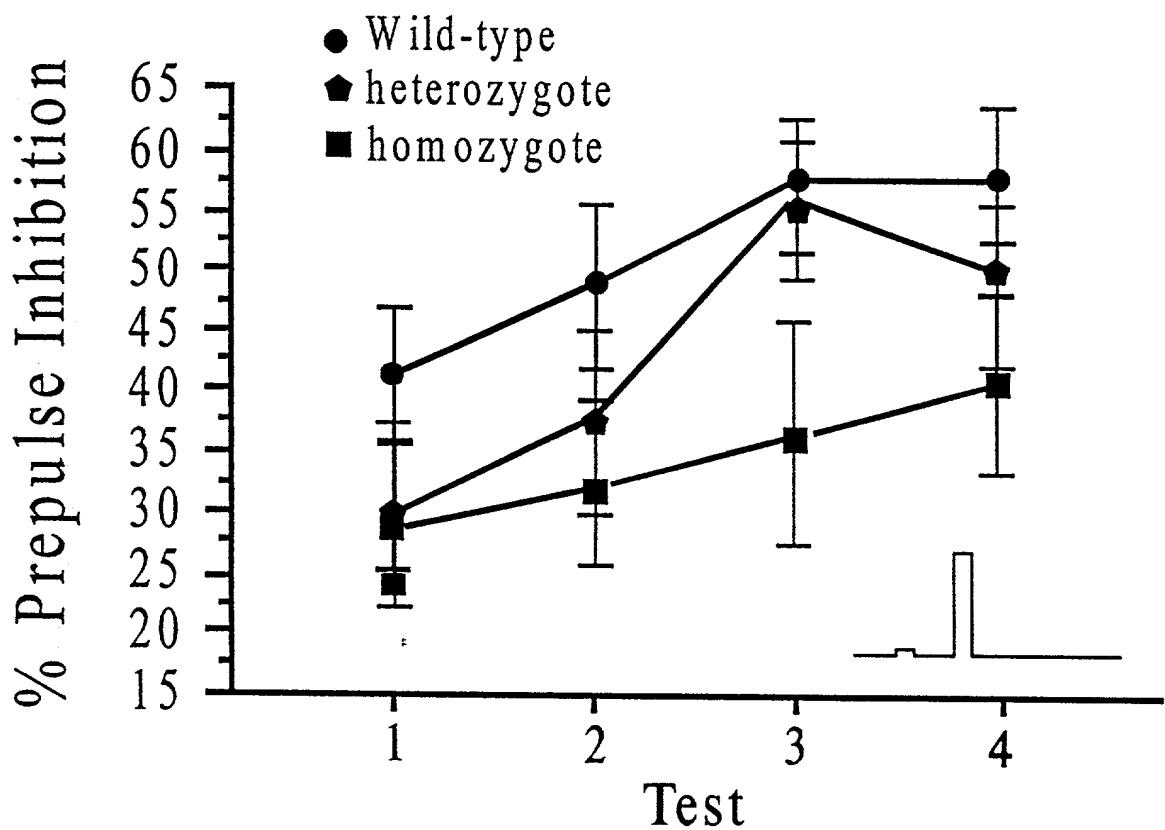


FIG. 38

Title: Purified and Isolated Potassium-Chloride Cotransporter
Nucleic Acids and Polypeptides and Therapeutic and
Engineering Methods Using Same
Applicant(s): Mount et al.
Serial No.: 09/835,976

COPY

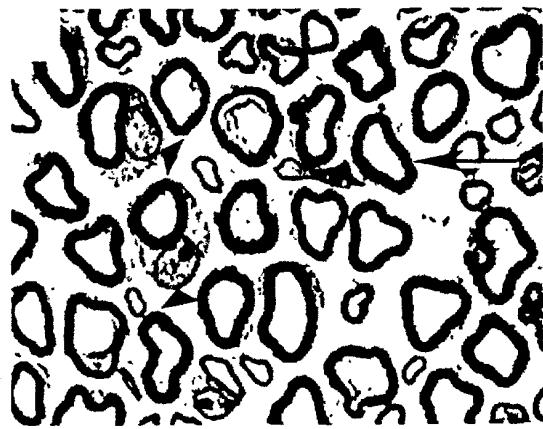


FIG. 39A



FIG. 39B



FIG. 39C



FIG. 39D

Title: Purified and Isolated Potassium-Chloride Cotransporter
Nu⁺ Acids and Polypeptides and Therapeutic and
Screening Methods Using Same
Applicant(s): Mount et al.
Serial No.: 09/835,976

COPY

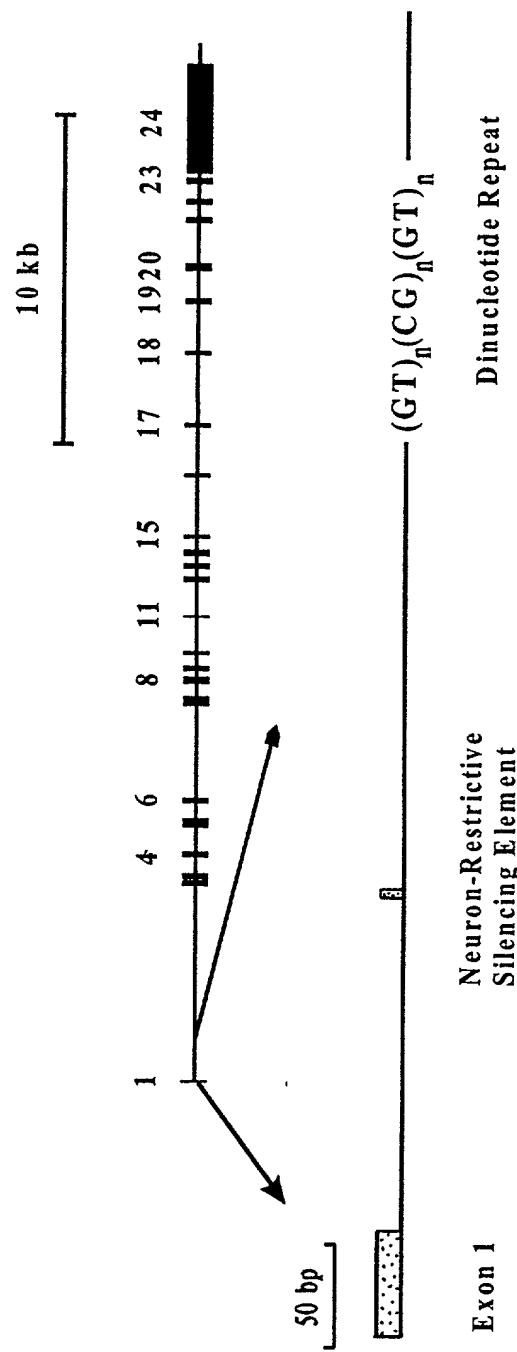


FIG. 40

COPY

Sequence of the hKCC2 dinucleotide repeat in several individuals:

Sample 1:

Allele A (GT)₁₈ (GC)₇ (AT)₁ (GT)₄ (GC)₁ (GT)₁₁ / Total = 84

Allele B (GT)₁₆ (GC)₅ (AT)₁ (GT)₅ (GC)₁ (GT)₉ / Total = 74

Sample 2:

Allele A (GT)₁₈ (GC)₄ (AT)₂ (GT)₄ (GC)₂ (GT)₁₁ / Total = 82

Sample 3:

Allele A (GT)₁₆ (GC)₆ (AT)₁ (GT)₄ (GC)₁ (GT)₁₁ / Total = 78

Allele B (GT)₁₄ (GC)₅ (AT)₁ (GT)₄ (GC)₁ (GT)₁₁ / Total = 72

Sample 4:

Allele A (GT)₁₉ (GC)₆ (AT)₂ (GT)₄ (GC)₂ (GT)₁₀ / Total = 86

Allele B (GT)₁₇ (GC)₇ (AT)₂ (GT)₄ (GC)₂ (GT)₁₀ / Total = 84

Sample 5:

Allele A (GT)₁₇ (GC)₆ (AT)₂ (GT)₄ (GC)₁ (GT)₁₀ / Total = 80

Allele B (GT)₁₆ (GC)₆ (AT)₂ (GT)₃ (GC)₂ (GT)₁₀ / Total = 78

Sample 6:

Allele A (GT)₁₅ (GC)₆ (AT)₁ (GT)₄ (GC)₁ (GT)₁₁ / Total = 76

Allele B (GT)₁₆ (GC)₅ (GT)₁ (AT)₁ (GT)₄ (GC)₁ (GT)₁₁ / Total = 78

Sample 7:

Allele A (GT)₁₆ (GC)₄ (GT)₁ (AT)₁ (GT)₅ (GC)₁ (GT)₁₀ / Total = 76